3 New PowerBooks! With CD Drives!

A better machine. A better magazine.

Mac ADDICT 4

DEC/96

- System 7.5.5: New Features and Oddities too!
- Clones, clones, clones:
  - More from Umax
  - New from Motorola
- Ask Guy Kawasaki
- Tons of Tips 'n Hints

Holiday Games Spectacular

Stupendous! Awe-inspiring!

Hurry! Tear the bag open and slam The Disc into your drive!

CRUSH! INVADING ARMIES

ZAP ALIENS



BOGGLE YOUR MIND

NUKE THE ENEMY

RACE! KILLER TANKS



Automate Your Mac

OpenDoc Parts Arrive

Go Live on the Web

And Humor, Too!

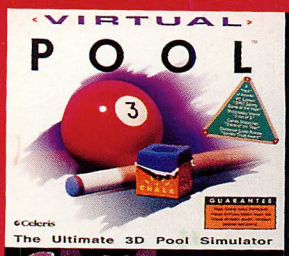
$7.99 U.S. $8.99 CAN.

12>

0 74470 01096 8

www.macaddict.com

imagine
a new way of publishing

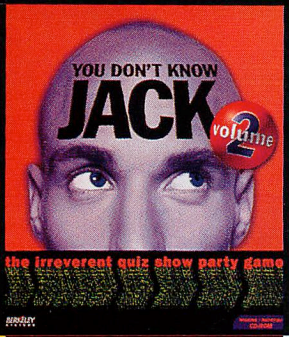


Virtual Pool from MacPlay has all the angles and shots of the real game—and then some. Features 4 great pool games, full-motion-video library, realistic physics and geometry, easy multiplayer modes, realistic 3-D perspective and graphics plus a musical jukebox.

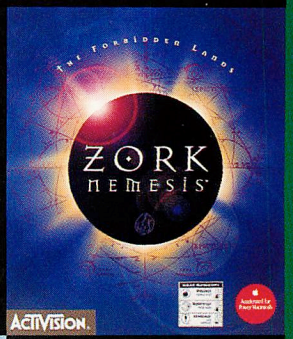


Five hundred years ago, Europe's conquering heroes pursued dreams of a new world. MacPlay's Conquest of the New World is a strategy game where you command explorers, settlers and mercenary soldiers as they discover a new world and build the ultimate nation.

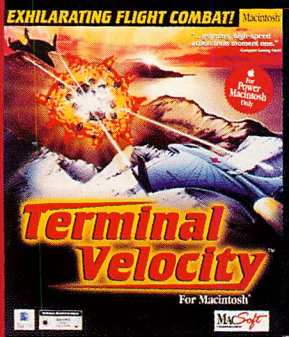
You Don't Know Jack, Volume 2, is the hilarious sequel to the original award-winning game. This Jack comes complete with 800 all-new questions, new question types, celebrity guest appearances, new features and more. From Berkeley Systems.



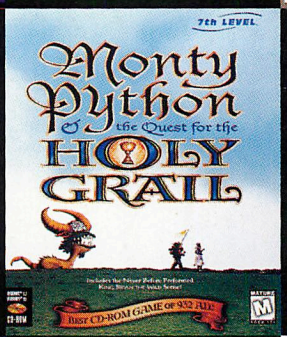
In Zork Nemesis, you're beckoned to the Forbidden Lands, a cursed world occupied only by the tortured spirits trapped there. Travel through 5 mind-bending worlds to discover the ancient secret of alchemy that will free the trapped souls from evil's grip. From Activision.



Is that the



MacSoft's Terminal Velocity offers fast 3-D texture-mapped graphics, full 360-degree flight movement and 7 weapons of extraordinary destruction as you fight your way through 9 unique planets with an awesome array of air-to-air and air-to-ground combat action.



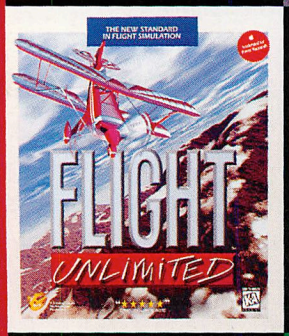
The best CD-ROM game of 932 A.D.—Monty Python and the Quest for the Holy Grail from 7th Level, Inc. It will take you on a romp through King Arthur's England, uncovering clues, solving puzzles and playing wholesome games like "Burn the Witch" and "Spank the Virgin."

Westwood Studios' Command and Conquer takes you into a gritty, high-tech world where the art of electronic intelligence and covert surveillance reigns supreme. Where guerrilla strategies and savage combat are the norm. Muster forces and lacerate your enemies to the bone.



Tank Commander by Eidos Interactive slams you into the cockpit of an M1 Abrams tank as you test your split-second-decision skills against enemy tanks in over 25 fully textured missions. Destroy T-72, Leopard and Challenger tanks with over 7 weapons.





With its incredibly realistic flight models, 3-D photo-realistic landscapes and the use of real-world physics, Flight Unlimited re-creates the most accurate sensation of aerobatic flying ever experienced on the Macintosh. For best results, play before lunch.



Origin Systems' Wing Commander IV is one of the latest space-combat games for the Mac. Take on the role of Colonel Blair, played by Mark Hamill in breathtaking space battles and heart-pounding drama, as you fight your way through the most spectacular Wing Commander yet.

Get ready for the biggest adrenaline rush of the holiday season. We're talking new games for the Mac.® We're also talking sweaty palms. Heart-pounding exhilaration. Stomach-in-the-throat thrills—the works. And here's the best part: with thousands of titles to choose from, you may never come down from that gaming high. Piqued your interest? Good.

©1996 Apple Computer, Inc. All rights reserved. Apple, the Apple logo, Mac, Macintosh, the Mac OS logo and Power Macintosh are registered trademarks of Apple Computer, Inc. "All

smell of chestnuts burning? Or just your neurological receptors going into overdrive?

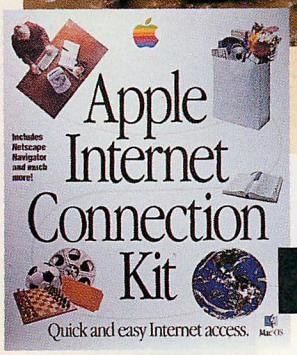


So now you're probably wondering how to get your twitching fingers on these games. Just visit stores like CompUSA, Staples, Micro Center and Fry's Electronics. Or, flip through any Mac mail-order catalogs. Or, hop on the Net. But no matter where you go to find them, remember to look for the smiling Mac OS logo. (All great software wears this face.™) If you're ready to take your adrenal glands on the ultimate ride, visit www.macsoftware.apple.com. And learn more about games for your Macintosh® and how to find them. Of course, if you want to, you can always use a phone: **call 800-500-4862**.

great software wears this face™ is a trademark of Apple Computer, Inc. All other products are trademarks or registered trademarks of their respective companies.

Until now, the on-ramps to the Internet have been under construction.





Introducing the Apple Internet Connection Kit.

Getting hooked up to the Internet can be a messy process. That is unless you've got exactly the right tools. Presenting the Apple® Internet Connection Kit. It's everything you need to get on and get around the Internet quickly, easily and with a minimum of frustration. Here's what you receive: Netscape Navigator™, Claris Emailer™ Lite, Progressive Networks RealAudio, NewsWatcher, Fetch, the Apple Internet Dialer, Quicktime® VR Player and more. Plus, if you come across anything you don't understand, Apple Guide on-line help is there to assist you right away.

Just think, 30 minutes after opening the box, you could be participating in discussion groups, E-mailing Aunt Helga in Denmark, visiting the Louvre, the Library of Congress or maybe even the local chicken joint. (Seems like everybody's got a Web site nowadays.)

Visit your Apple reseller, or order direct by calling **1-800-950-5382 ext. 784.** And when you do get on the Net, check out our Web site at http://www.apple.com.

Apple. The power to be your best.

CLARIS Em@iler

NETSCAPE

©1995 Apple Computer, Inc. All rights reserved. Apple, the Apple logo and QuickTime are registered trademarks of Apple Computer, Inc. Claris EMailer is a trademark of Claris Corporation. Netscape Navigator is a trademark of Netscape Communications Corporation. All other trademarks are the property of their respective owners.



The monster in the box may be your very own computer! (Ours is named Spalding.)

December 1996

Mac ADDICT 4

highlights

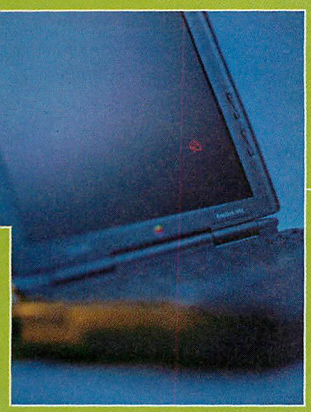
34 The Hard Stuff
Get the hardware to play your cards right. Play alone. Play with friends. Just play! Of course, you *can* work on the ultimate gaming Mac, too! **BY KATHY TAFEL**

38 The Soft Stuff
29 of the super-best games for the Mac. **BY KATHY TAFEL**

46 Under an 'Epic' Cover
Are Apple's new PowerBooks the long-awaited Holy Grail? Or are they just more of the same ol' same ol'? **BY OWEN W. LINZMAYER**

50 Winners!
In our premiere issue, we promised five custom-painted Power Macs to our contest winners. Find out who won, why, and what the Macs look like. **BY CHERYL ENGLAND**

54 They're Live Objects
Okay, they used to be just plain parts, but now these OpenDoc "thingies" have been renamed Live Objects. Here's a rundown on what's available. **BY DAVID REYNOLDS**



PowerFul treat: This time it won't melt in your lap.

how to

98 Create a Macro
If this were the '70s, you'd be learning macramé. That was then. This is now. And "now" is changing your bit depth and rotating sigs. You've come a long way...

102 Get Your Site Online
At last! It's time to take your Web site live.



Custom cool! It's like having your very own desktop Harley. No helmet required.



You can call 'em hot! You can call 'em "Live"! But whatever you do, go get 'em!

Invite these exciting, wonderful creatures home.Then kill them.





Marathon Infinity—what a blast! Amazingly enough, we actually got a little work done.

every month

6 Editor's Note
Syquest, and Zip, and MO, oh my!

10 Letters
You think we read this barrage? Ha!

24 Get Info
Clones are coming out of the woodwork, there's new System software, and the Number One Mac Evangelist with answers, answers, answers! Plus our monthly contest. Whoa!

30 Cravings
Slurp! It's the six most mouth-watering products of the month.

60 Reviews
CorelDraw, PhotoTools, Fractal Expression, a Umax clone, Marathon Infinity, WarCraft II, and a bunch of other have-to-have, great software.

104 Ask Us
Those darned undeletable files, the one and only cool thing Windows 95 does (and how you can make your Mac do it, too!), an Easter egg with antlers, computers possessed by the devil, and more.

108 PowerPlay
Find out what Reality Bytes, the creator of Havoc, is doing to advance state-of-the-art gameplay in its next release, Dark Vengeance.

128 Shut Down
The last word. The last laugh.

the disc



14 Our games spectacular will keep you busy, busy, busy during the holidays. We've packed The Disc with 32 games of the demo and shareware persuasion. Plus, there's new System software to install and a handful of new shareware. And don't forget to look for that infamous hot spot!

online

http://www.macaddict.com

22 Come on in, put your feet up, pour yourself a drink and make yourself at home on our Web site. Like a faithful puppy, our online extension will bring you today's news, fetch the things you want and need, keep you company, and drool on the carpet. It's the Mac's best friend!

MacADDICT

EDITORIAL
EDITOR-IN-CHIEF **Cheryl England**
MANAGING EDITOR **Judy Lewenthal**
ASSOCIATE EDITORS **Nikki Echler, David Reynolds, Kathy Tafel, Daniel Drew Turner (reviews)**
CD-ROM: **Thomas Hale (director, development), Stephen Gifford (disc content consultant)**
ONLINE EDITOR **Mark Simmons**
CONTRIBUTING EDITORS **Raf Anzovin, Steven Anzovin, Raines Cohen, Joseph O. Holmes, Ross Scott Rubin**

ART
ART DIRECTOR **Ken Bousquet**
ASSISTANT ART DIRECTOR **Adam Vanderhoof**
FREELANCE DESIGNER **Gloria Orbegozo**

PRODUCTION
PRODUCTION DIRECTOR **Richard Lesovoy**
PRODUCTION COORDINATOR **Ken Brandow**

ADVERTISING
PUBLISHER **Patricia Neuray**
REGIONAL AD MANAGER **André Lengyel**
REGIONAL AD MANAGER **John Singer**
REGIONAL AD MANAGER **Christina Sorrentino**
MARKETPLACE ACCOUNT MANAGER **Mary Lachapelle**
ADVERTISING COORDINATOR **Jana Massey**

CIRCULATION
CIRCULATION MANAGER **Donna Badgett**
NEWSSTAND MANAGER **Bruce Eldridge**
FULFILLMENT MANAGER **Dana Runkle**
CIRCULATION CONSULTANT **Gail Egbert**

Imagine Publishing, Inc.
PRESIDENT **Chris Anderson**
VICE PRESIDENT/CFO **Tom Valentino**
VICE PRESIDENT/CIRCULATION **Holly Klingel**
CHIEF INFORMATION OFFICER **John Montgomery**
NEW MEDIA BUSINESS DEVELOPMENT MANAGER **Mary Hoppin**
INTERNATIONAL LICENSING: Robert J. Abramson & Associates, Inc., 720 Post Road, Scarsdale, NY 10583

Volume 1, Number 4
MacADDICT (ISSN 1088-548X) is published monthly by Imagine Publishing, Inc., 150 North Hill Drive, Brisbane, CA 94005, USA. Application to mail at Periodical class postage pending at Brisbane, CA and at additional mailing offices. Newsstand distribution is handled by Curtis Circulation Company. Basic subscription rates: one year (12 issues + 12 CD-ROMs) U.S. $39.90, Canada $43.95, U.S. pre-paid funds only. Canadian price includes postage and GST (GST 128220688). (IPM 0962392) Outside the U.S. and Canada, price is $53.95, U.S. pre-paid funds only. For customer service, write MacAddict, Customer Service, 150 North Hill Drive, Brisbane, CA 94005; 415-468-4869. Send address changes to MacAddict, 150 North Hill Drive, Brisbane, CA 94005. Imagine Publishing also publishes *boot, Ultra Game Players, Next Generation, PC Gamer,* and *The Net.*

Entire contents copyright 1996, Imagine Publishing, Inc. All rights reserved. Reproduction in whole or in part is prohibited. Imagine Publishing, Inc. is not affiliated with the companies or products covered in *MacAddict*.

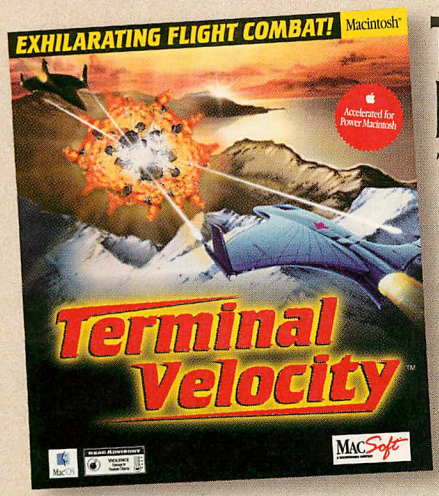
Standard Mail enclosed in versions: A2, C, and C1.
PRODUCED IN THE UNITED STATES OF AMERICA.

STANDARD CLASS
U.S. POSTAGE PAID
Waseca, MN
Permit No. 348

Buck up, Bethany. Hey Joe, thanks for saving the show. Um, does anyone have Steve's phone number? Cheryl, what's that on your wall?



Games & More Under $35.00



THUNDERING POWER. EXPLOSIVE ACTION.

Terminal Velocity is absolutely the most exhilarating flight game available for the Macintosh. It offers fast 3D texture-mapped graphics, full 360-degree flight movement and 7 weapons of extraordinary destruction. Fight your way through 9 unique planets with an awesome array of spectacular air-to-air and air-to-ground combat action.

$34.99
(Requires Power Macintosh. CD-ROM only)



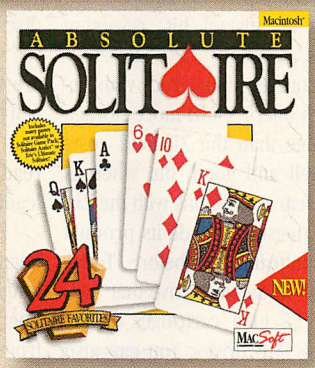
"...gripping high-speed action from moment one."
-Computer Gaming World

"A symphony of titillating action and g-force slurping excitement..."
-Strategy Plus



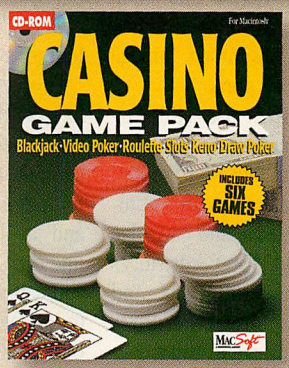
Mac Arcade Pak 2

More red hot arcade action with five of the best arcade classics ever! Modern-day versions of Pac-Man™, Gauntlet™, Asteroids™, Galaxian™ and StarCastle.™ Includes a sequel to MacWorld 1995 Hall of Fame and a runner-up for Inside Mac Games 1995 Best Arcade Game.
(CD-ROM only) $24.99



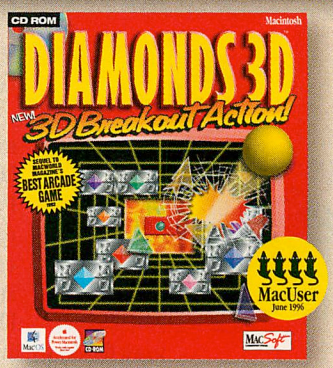
Absolute Solitaire

We asked dozens of solitaire fanatics to help us design the perfect solitaire package. Absolute Solitaire is what they created. Includes 24 new games and a brand new interface for serious solitaire gameplay.
$24.99



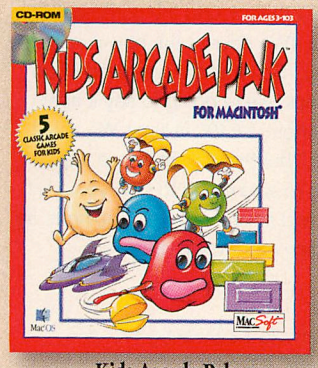
Casino Game Pack

Quality collection of six popular casino games: Blackjack, Video Poker, Roulette, Slots, Keno and Draw Poker.
(CD-ROM only) $24.99



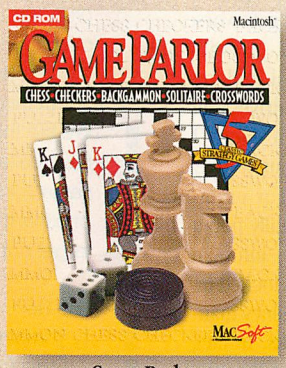
Diamonds 3D

Breakout in three dimensions! Inside Mac Games calls it "Fun and addictive. The best breakout-style game we've played." The ball doesn't bounce up and down, it comes right at you!
(CD-ROM only) $24.99



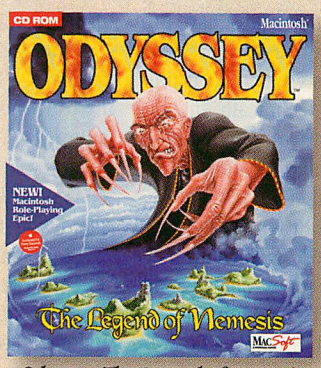
Kids Arcade Pak

Kids Arcade Pak is bursting with five classic arcade games designed especially for kids. Each game features large, brightly colored graphics, voice instruction and adjustable difficulty levels. Includes kids' versions of Tetris,™ Breakout,™ Pac-Man,™ Galaxian™ and Pinball.™
(CD-ROM only) $24.99



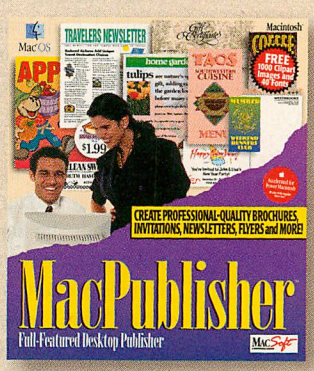
Game Parlor

Outstanding collection of five popular strategy games: Chess, Checkers, Backgammon, Solitaire, Crosswords.
$24.99
(CD-ROM only)



Odyssey: The Legend of Nemesis

The most advanced Macintosh role-playing game ever! Venture into the mystical lands of Odyssey. Discover nine islands of extraordinary adventure, fight epic battles and dwell amongst the fascinating inhabitants.
$34.99
(CD-ROM only)



MacPublisher

A full-featured desktop publisher that gives you the same powerful page layout tools used by the best graphic artists. Use it to quickly and easily create professional quality brochures, invitations, newsletters, flyers or any other document.
$24.99

Lots more. Call for a free catalog.

Available now from your favorite reseller, or by calling 800-229-2714

Please add $2.95 per order for shipping and handling if ordering by phone.

MacSoft™

WizardWorks Group, Inc. • 3850 Annapolis Lane, Suite 100 • Plymouth, MN 55447 612/559-5140

editor's note

A year-long love affair ends in a drive-by drive comparison.

You know how car magazines will test a car for a year to see how well it holds up? Well, I've been using an Iomega Zip drive, with its 100MB cartridge for over a year now, and I'm still in love with this little machine. It's fast. It's reliable. It's portable. The cartridges are small and rugged. And it's affordable. (You can get the drive and one cartridge for under $200 and extra cartridges for about $20 each.)

But like any love affair that's gone on too long, it's starting to get, well, a little dull. I want more: bigger, faster, cheaper. I want an Iomega Jaz drive... I think.



Jaz drives use 1GB cartridges that are only slightly larger than those for the Zip. Prices are equally compelling: a drive and cartridge cost about $500; cartridges are about $100 each. And like the Zip drives, Jaz drives work flawlessly. Toss in a cartridge, wait a couple of seconds for it to mount on the Desktop and you're off. Problem is, Jaz drives aren't yet ubiquitous. Many people who recently splurged on a Zip or Syquest drive aren't willing to move to yet another storage medium.

Ah, Syquest—once the removable storage standard. Both Iomega and Syquest have produced removable media drives for years now. Iomega's Bernoulli drives were, in their time, widely acknowledged as technically superior to the Syquest 44MB drives. So, how did Syquest become the de facto standard?

Iomega couldn't market its way out of a paper bag. The Bernoulli drives were big and bulky; and, worse, they cost significantly more than the Syquest drives. Syquest quickly made inroads into service bureaus. At the time, it was mainly graphics professionals who were cranking out files huge enough to require a means of transfer other than a network. Once service bureaus had Syquest drives, graphic artists bought them, too. In droves.

Iomega seemed doomed.

But a funny thing happened on the way to the storage forum. While Syquest owners battled reliability problems, awkward, multi-step cartridge mounting and unmounting procedures, and incompatibilities among 44MB, 88MB, and 105MB drives, Iomega was quietly readying the successor to the Bernoulli drive—the Zip.

The Zip was an instant hit, reversing Iomega's fortunes.

Syquest, of course, countered with its EZ135 drive which offers 35MB more storage space per cartridge than the Zip and costs less. That's all well and good, but whereas Iomega has two clear-cut options with the Zip and Jaz drives, Syquest has made its product line even more confusing than before. Today you can get a 200MB Syquest drive that uses the same style 5.25 inch cartridges as the older 44MB and 88MB drives. You can also get an EZ135 drive that uses smaller 3.5 inch cartridges. And an EZ Flyer 230 drive that uses cartridges that look identical to those for the EZ135. There are also 270MB and 105MB 3.5 inch cartridges for older drives. Confused? It gets worse.

You just can't go willy-nilly sticking identical-looking cartridges into the drives that support that form face. I mean, you *can*, but it only causes problems. For example, if you accidentally pop a 270MB cartridge into an EZ135 drive, it gets locked in. Not even the emergency manual eject hole works. In fact, the only way to get the cartridge out is to pull it using tweezers or needle-nose pliers—which breaks the drive.

And you must still use a utility to mount cartridges. Unmounting involves a series of steps that allow the drive to spin down before you manually eject the cartridge via a button and a lever. Come on, this is 1996. Storage devices shouldn't be this hard to use.

Magneto-optical drives are today's dark horse candidate for removable storage. In the past, these drives have been more expensive than other removables. But now drive prices hover around $300, while 230MB cartridges cost about $10 and 640MB cartridges are about $40. The only real drawback to the magneto-opticals, is their slow speed. I'm spoiled by the Zip drive's responsiveness.

And, for the future, there's digital versatile discs (DVD). The first generation of these drives will be read-only, like today's CDs. They are the same physical size as a CD, but they will hold 4.7GB of data; later they'll hold twice that much, and even later you'll be able to read and write to them. Apple has a chance at leading the DVD wagon.

But that's the future. Today, I think I'll keep my trusty Zip drive and settle for looking longingly at the Jaz. By the time I can afford to upgrade, I'm sure I'll have even more variety from which to choose. —*Cheryl England*

Iomega seemed doomed. But a funny thing happened on the way to the storage forum.

Sex Sells or at least gets us letters

Yup, we called the Performa 6400 "sexy." We said it had "great legs" and a "curvy top." And we got letters.

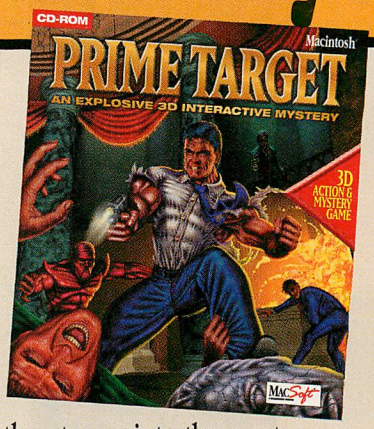
Some of you simply didn't agree. Others thought we needed to get out of the office more. (Yup, we do.) A few others found the comments offensive to women. (We never said, however, that it was a female Mac.) So what are we going to do about this? Well, heck, we're going to say it again. We still think the Performa 6400 is sexy. We could have called it "cute," but that doesn't have the same panache. We're also going to give you a list of other things we find sexy. And, we're going to try to get out of the office more often. See ya!

Top Sexy Products
1. Thrustmaster Formula T2 Steering Wheel
2. Gyro Point "mouse" (Gyration)
3. Leather-covered PowerBook
4. Bryce 2 (Meta Tools)
5. Casio QV-10
6. Poser (Fractal)
7. Logomotion (Strata)
8. Marathon (Bungie)
9. ATI Xclaim VR
10. Performa 6400 (Apple)
11. OpenDoc (Apple)
12. QuickTime (Apple)

Enough Work. Let's Play.



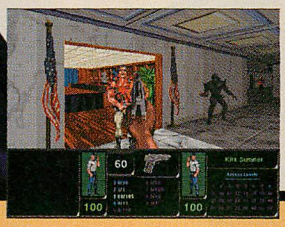
The Most Advanced Mac 3D Shoot-em-up Ever!



A powerful senator is brutally murdered while working late in her Washington D.C. office. Now you must solve the mystery of her death in this action-packed 3D shoot-em-up. Prime Target thrusts you into the most dynamic Mac gaming world ever. Blood splatters on the wall. Glass shatters in your face. You can almost smell the carnage around you!

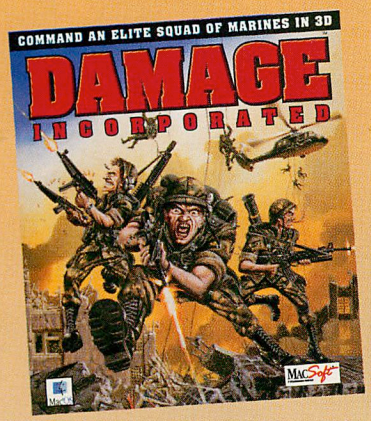
SYSTEM REQUIREMENTS: Any PowerMacintosh with color monitor and CD-ROM drive.

MSRP: ~~$49.99~~ **$34.99**









Command an Elite Squad of Marines in 3D





Take command of the world's top special forces unit in this extraordinary 3D first-person shooting extravaganza. Command four highly-trained marines as you eradicate deadly enemies. Fight for your life while strategically issuing orders to your squad. All in 3D. So real you'll be a bloody wreck before it's over.

SYSTEM REQUIREMENTS: Any PowerMacintosh with color monitor and CD-ROM drive.

MSRP: ~~$49.99~~ **$34.99**

MacSoft™

WizardWorks Group, Inc. • 3850 Annapolis Lane, Suite 100 • Plymouth, MN 55447 • 612/559-5140

Lots more. Call for a free catalog.

Available now from your favorite reseller, or by calling 800-229-2714

Please add $2.95 per order for shipping and handling if ordering by phone.



Your personal memories.

No other computer in the world makes it this easy to create your own home movies. Avid Cinema software guides you step by step through the entire moviemaking process, from planning shots to editing video to publishing your finished movies.



Your personal education.

It comes with some of the most popular educational software already installed and runs hundreds of other educational programs that make learning more fun—to help kindergartners learn to read and write, high school kids prepare for college or grown-ups master a second language.

Your personal finances.

The Performa 6400 computer brings the point-and-click simplicity of a Macintosh to a wide range of software for managing your family finances—programs like Quicken that help you do your taxes, track your investments and balance your checkbook.



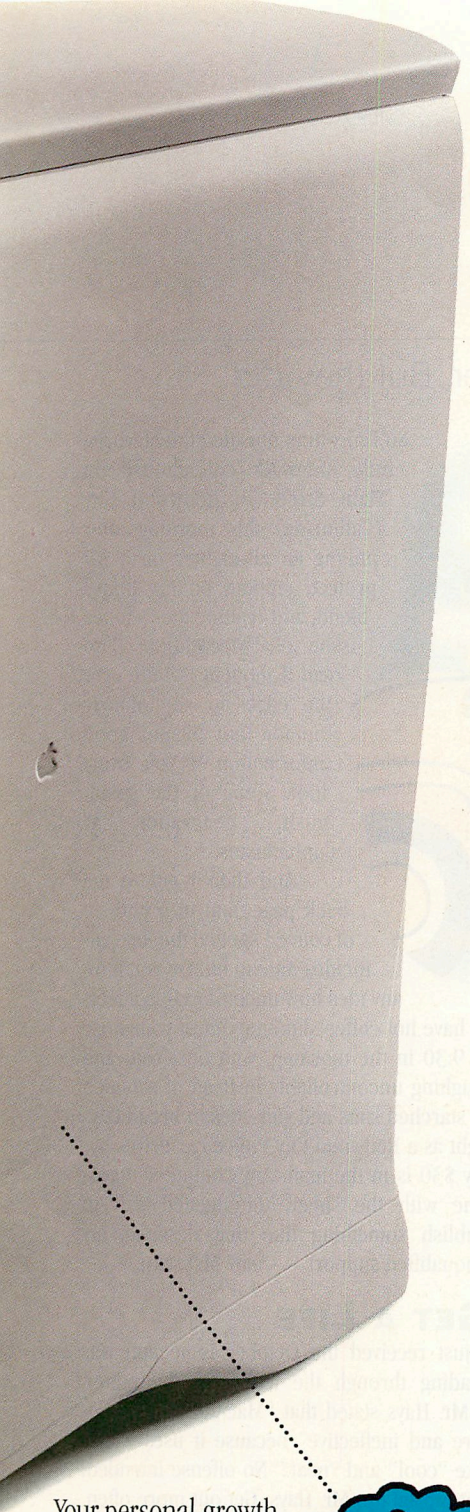
Your personal interests.

*We've even made the Internet more personal by including your own Personalized Internet Launcher—a service from Apple that automatically searches the Internet and brings to your screen the newest and best web sites that interest you most.**



How much more personal c

**Internet service provider fees and phone charges not included. †180 and 200 MHz processors are different configurations at different price points. Monitor and printer sold separately.* *©1996 Apple Computer, Inc. All rights reserved. Apple, the Apple logo, Macintosh, Performa and StyleWriter are registered trademarks of Apple trademark used under license by Insignia from Microsoft Corporation. All Macintosh computers are designed to be accessible to individuals with disability. To learn more (U.S. only), call 800-600-7808 or TTY 800-755-0601.*



Your personal growth.

There's more than enough power for today's applications and plenty of expansion options that make it easy to add functionality no matter what you want to do — now, and down the road. When your family grows, your Performa grows with you.

Your personal computer.

No, that cozy-looking piece of hardware isn't a newfangled ottoman. But you'll be amazed at how comfortable it feels in your home. It's the new Performa 6400 tower — built around the PowerPC™ 603e RISC chip running at 180 or 200 MHz with up to 2 gigabytes of hard drive space, and shown with the new Apple® Multiple Scan 15AV monitor and the Apple Color StyleWriter® 2500.†



Introducing the Macintosh Performa 6400.

Don't be too surprised by how familiar the Macintosh® Performa® 6400 feels when you bring it home.

After all, it *is* a Macintosh — still the only computer in the world designed from the very first chip to work the way people work.

And it *is* a Performa — designed with families in mind to be easy to set up, easy to learn and easy to use.

But now we've not only given it powerful new capabilities no other home computer has ever had before. We've also made the most personal computer of all more personal than ever.

Thousands of learning and business programs are available for Macintosh. And twenty-five popular titles come preinstalled with the Performa 6400. Like Grolier's Multimedia Encyclopedia, ClarisWorks 4.0 and Quicken SE.

Right out of the box, your kids can instantly find answers to their questions, complete with video, animation and sound. And you can start working with a spreadsheet, word processor, financial tools and more.

Every Performa model comes with Macintosh PC Exchange,™ allowing you to read from and write to DOS disks. Add a program like SoftWindows™ or a PC compatibility card, and you can even bring work home from the office and run your Windows applications at the touch of a key.

Of course, all work and no play makes Jack the world's dullest parent.

That's why the Performa 6400 comes with today's most advanced multimedia features. Including an 8x-speed CD-ROM drive for the smoothest game animation and 16-bit stereo sound for the clearest listening experience. And with the addition of Avid® Cinema software, creating your own home movies becomes unbelievably easy.

It also brings the Internet home with a 28.8 Kbps modem and all the software you need not only to get up and surfing on the Net,* but to easily create your own web page as well.

And although the life span of some computers may appear to extend just beyond that of the average goldfish, we've loaded the Performa 6400 with ample power and plenty of expansion options so you and your family will enjoy it for years to come.

It's everything a family computer should be. For the name of the Apple reseller near you, and for information on special holiday promotions, call 800-446-3000, extension 100. Or visit us on the Internet at www.apple.com/

And bring home the most personal computer of all. Macintosh.

an a personal computer get?

Computer, Inc. Macintosh PC Exchange is a trademark of Apple Computer, Inc. PowerPC is a trademark of International Business Machines Corporation, used under license therefrom. Avid is a registered trademark of Avid Technology, Inc. Windows is a registered trademark of Microsoft Corporation and SoftWindows is a

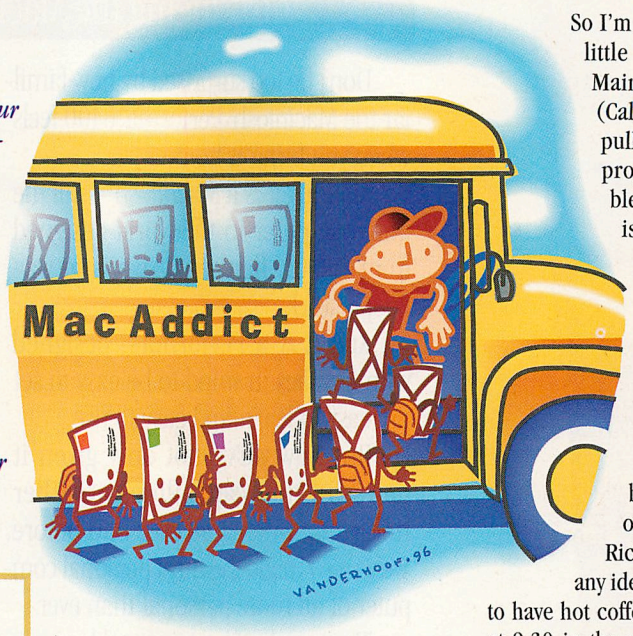
letters

We didn't think the letters could get any weirder. But they did.

This Month

Reading the mail is now among our favorite things to do. We love your stories, your comments, your jokes. We only wish we had more space to run all of your responses. We also love the marriage proposals and will gladly accept indulgent praise and sensitive criticism. Write to us at: MacDudes, MacAddict, 150 North Hill Drive, Brisbane, CA 94005, or send e-mail to letters@macaddict.com. For CD-ROM or subscription queries, please call our customer service department at 415-468-4869

GET ON, GET ACTIVE. Talk to us and talk to other Mac addicts on the Web site.



RECENTLY SIGHTED

Once upon a time...

It was the spring of 1984. Apple Computer had launched the 128K Macintosh. I had just bought one of the first Macs in Montreal. A group of Mac addicts soon began to haunt the local dealer to exchange ideas and gossip about upcoming software.

Every day as I entered, there would be a sign on a shelf. It was a simple piece of clear half-inch, beveled plate glass with the logo of the new Mac etched into it, painted with colored, translucent tints. A small fluorescent tube in the base illuminated the whole logo.

That sign was the symbol of a new way of thinking about computers. I was startled one day to find it gone. I asked the assistant manager where it was, and he said that they were changing the layout of the store and the sign was going to be thrown away. I made a rather spontaneous offer of $20 for it. He considered for about five seconds and the deal was done.

The sign now sits on my shelf and sheds light on my ideas and me. —Rick Ling

Uh, Sure

Would you guys like to send me a Mac? All I need is one. —Jonathan Dreyer

You should consider a monthly section where you mention some Web site, organization, team, business, TV show, whatever, that uses or features Macs. For example... hmm, I don't know... how about the award-winning Web site "Weird Al Yankovic For President" at <http://www.epix.net/~lexf/al.html>? That would be a good one to start, I guess. I just checked it out, and—how's this for coincidence—I MADE IT! Whoa! —Lex Friedman

I now have 16MB of RAM and should be able to do anything, even go to the moon! —Charlotte Ellinwood

I would accept a free lifetime subscription if you offered it! —Scott Williams

Ewww!

Had a little accident while working at my Mac; I bled; I applied pressure; I decided to rebuild my desktop; when it finished, I released the pressure; the bleeding stopped. Ergo, clotting time = desktop rebuild time! —Charles Cusumano

So I'm sitting outside at my favorite little sidewalk coffeehouse on Main Street in Redwood City (California) this morning after pulling an all-nighter on a 3D project, sipping on my house blend, and reading the October issue of "MacAddict." Fun read, I thought. A little over the edge on sophomoric humor, but lots of good information if you overlook some of the spammish, "generation X" euphemisms.

And then I got to the back page, and in a mid-sip of coffee I spotted the Reagan-Rickles-Amelio bit. Do you have any idea how uncomfortable it feels to have hot coffee shooting out of your nose at 9:30 in the morning, with no sleep, and laughing uncontrollably in front of a bunch of starched suits and suit-ettes in broad daylight as a Redwood City Police car drives by? My $30 is in the mail. Any computer magazine with the sheer, unmitigated gall to publish something like that deserves my unqualified support. —Andy McKerral

Get a Life

I just received the October issue and was reading through the letters to the editor. A Mr. Hays stated that "MacAddict is immature and ineffective" because it uses words like "cool" and "neat." No offense intended, but loosen up, Mr. Hays. Get out more often. Take a valium. Somethin'. If all you want is information given "according to the customary forms of exposition," then grab a Lotus 1-2-3 manual and knock yourself out. —RW Harris

As a former mechanic I can tell you someone has torqued this guy's head bolts down to 150 ft. lbs. CURE: Undo all bolts, replace head gasket, and retorque to 28 ft. lbs. Talk about uptight—I bet you couldn't pull a greased No. 10 thread out of this guy's a** with a Caterpillar tractor. —Ron Samson

We don't even want to go there.

English, Please!

But hey, what do you expect from an addicted to addiction person who can't be addicted to his addiction because of an underaddiction, where the addiction is Apple, and the person is me, and the underaddiction is homework. Confused? Well at least you don't have to work with the devil's tool at school—Windows 95. —Chris Doorley

Chris, you're scaring us. We're actually starting to understand your letters. Nothing like a little regular correspondence to keep us on our toes...

Aack! Aliens!

Forgive me for being raised on the planet Vulcan, but it seems to me that a "September" issue should arrive, at the earliest, during the last week of August. I really don't get it. There are 12 issues a year. There are 12 months in a year. Why not have them match? —Dr. Rick Brinkman

It involves the time gap between shipping to the newsstand and mailing to subscribers, how long the issue stays on the stand, and a bunch of other arcane stuff. We'd explain in more detail, but not until you lose the rubber ears.

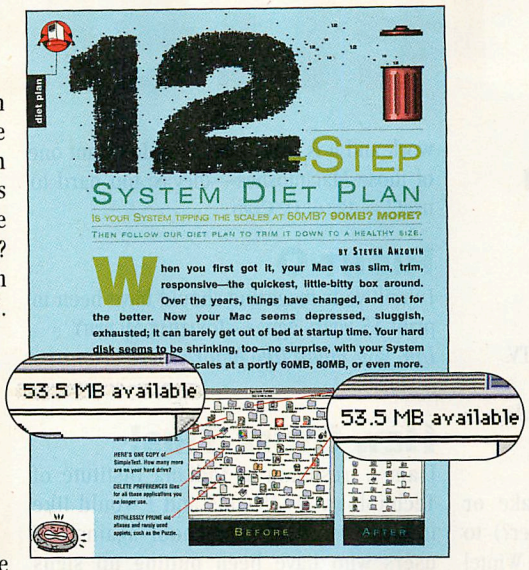
Okay, You Win

I wanted to take a shot at getting the esteemed "Most Observant Reader" award. In the second to last line of the second paragraph of PowerPlay (Oct/96, p90), the word "become" is spelled "beome." Of course you probably already noticed this, but it was worth a shot. —Andy Swindler

But Close Behind...

Your review of Stuffit Deluxe stated that you wished that the program had a Segment command. It does. Did you all check under the Translate menu? Yep, there it is. It allows you to segment a program to disks of your choice, or you may join segments. Is this an oopsie and do I get a prize? —Ron Wilson

I am slightly skeptical of your 12-Step Diet Plan (Oct/96, p36) if the results are as shown in your Before and After screenshots on page 36. If you examine the header carefully in the After screenshot (System Folder, 28 Items, 202.3MB in disk, 53.5 available),



SO WE GOOFED. Before (left) and after (right). They say thatconfession is good for the soul.

it would appear that the clutter has not been purged just yet. The Total Weight Lost of 68.6MB reported on page 39 must be after emptying the Trash. —Ron Davies

Ulp. You caught us. We kinda sorta, well, uh, forgot to take real Before and After screen shots until, well, um, the last minute. So we, uh, faked it. Ouch. Mea culpa. We're sorry. We won't do that again, we promise.

Wrecks on the Highway of Love

While experiencing the vicarious thrill of going for a ride with Kathy Tafel in her new Del Sol, I received the unwelcome revelation that she is already married. Damn! —David Payne

Nikki, marry me... — Kevin M. Kennedy

No.

While in America on my honeymoon, I saw a copy of your premiere issue and without hesitation bought it. From the second I started reading it, I couldn't wait to get back home to my computer (which *really* depressed my new husband). —Abigail Perets

Thanks for reassuring us that there are computer widowers as well as widows!

'Fess Up, Boy

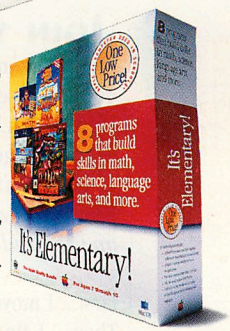
P.S. I have a confession to make. I wrote this using Microsoft (bleuk!) Word. Yes, it's true. No, it's not quite as bad as you think—it's version 5.1. Please forgive me. This would explain the bad formatting. —Walter S. Graff

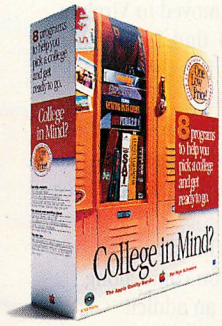
But wait, there's more.



"Early Learning Kit." Includes 8 interactive learning programs that will help your kids learn basic reading, writing and counting skills long before they even start school.

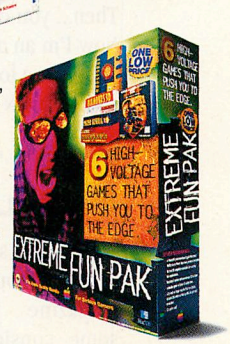
"It's Elementary!" Includes 8 interactive learning and entertaining programs that will have your 7- to 10-year-old learning language arts, math, science and social studies.





"College in Mind?" Includes 8 top programs that will help your kids get organized and ready for college by sharpening their test-taking, writing and interview skills.

"Extreme Fun Pak." Any of you hard-core gamers up for a challenge? These 6 blockbuster games will take you into the realm of intense action. Just remember to give your kids a chance.



Get up to 8 Macintosh® programs at one great low price when you purchase any of these educational and entertainment software bundles from Apple.® From early learning development to sizzling game-playing excitement, you'll find that Macintosh is the easiest way to bring learning—and fun—home. What more could you possibly ask for?

CompUSA · Micro Center · Fry's Electronics · ComputerWare · J&R Computer World

And other fine Apple authorized resellers

© 1996 Apple Computer, Inc. All rights reserved. Apple, the Apple logo and Macintosh are registered trademarks of Apple Computer, Inc., registered in the U.S.A. and other countries. It's Elementary!, College in Mind? and Extreme Fun Pak are trademarks of Apple Computer, Inc. All other company and/or product names are trademarks or registered trademarks of their respective companies.

letters

Get Off Our Property, Ma'am

What is in your office coffeepot?
—Catherine Pettitt
Why, coffee, what else?

Bitch Cakes... You watch too much TV.
—Joel Butkowski
Can this wait until the commercial?

Join the Club

We really need a secret handshake or code phrase (live long and prosper?) to identify each other in a sea of Wintel users. Any good ideas out there?
—Peter Gelb
What? You don't know it? You mean no one showed you?

First... I moved to Virginia.
Then... I find I have to pay more in taxes than I did in New York.
Then... they tell this big-time Wintel user that his new computer is a Power Mac!
Then... I liked it.
Then... you came along.
Now I'm an addict!
Things are looking up!
—Evan Kohn

Ooh, That Smell

Well, we've solved the mystery about why our magazine has what some consider a great smell. It's Downy! No kidding. Our printers, Brown Printing, gently bathe each issue in a few gallons of that famous fabric softener to ensure a static-free, baby-soft MacAddict experience. Guess which scent they use?

Quote of the day from my garage mechanic: "I can't get the modem on my PC to work and it is slow, but I wouldn't want one of those Macintoshes—they're too hard to use!" —Brian D. Card

Right-O

I think your magazine should have been in print 15 years ago. —Jonathan MurphY
Um, you mean like before there even was a Mac?

Hey, Stuff This!

I am a freshman at Indiana Institute of Technology. My friends and I would like to win a war at our school against PC users who have been putting up signs that say Apple computers blow!!! Can you give me information on any pictures that are anti-PC in nature, that we could possibly download and use?
—Matthew Shuter

Fancy that, we just received a letter from reader Scott Pelok raving about Peter Steinfeld's cartoons at the MacWorks site: <http://www.macworks.com/stuff this/stuff this.html>.



Look Out Jenny Craig

Just wanted to let you know that I put my Performa 6115CD on your diet plan (Oct/96) and reduced fat from 103MB down to an amazing 71MB!! I couldn't believe how much excess blubber my poor machine was carrying around! —Anthony J. Correa

I didn't realize there were so many files I didn't really need. —Joanie Griffin

I have already put my Mac on a diet (didn't need to trim much), and next time my system goes kafluey, I won't be sitting here going, "Now what..." —Grace Lambie

The article about putting your System Folder on a diet was the best I've seen on the subject. —Colleen Dick

You know you're a Mac addict when instead of using proper terminology for things that are broken, you ask "what'd the error message say?"
—Marc Fisher

Helpful Hints

In the article "The Top 21 Things That Can Go Wrong With Your Mac" (Oct/96, p40), Symptom 2 is "The Mac ejects a floppy disk or removable... " The only solution to the problem that Mr. Cohen lists is using the Put Away command (Command-Y). While this solves the problem in the long term, it does not address the question of what to do if you are in a pinch and cannot find the disk. If the Mac asks for a floppy disk and you do not have it, press Command-Period. You may have to hit it a number of times, but it will eventually say that the disk could not be found and remove the image from the Desktop and never ask for it again. This is the quickest way of dealing with the dreaded "please insert xxx" message. —Pete S. Futro

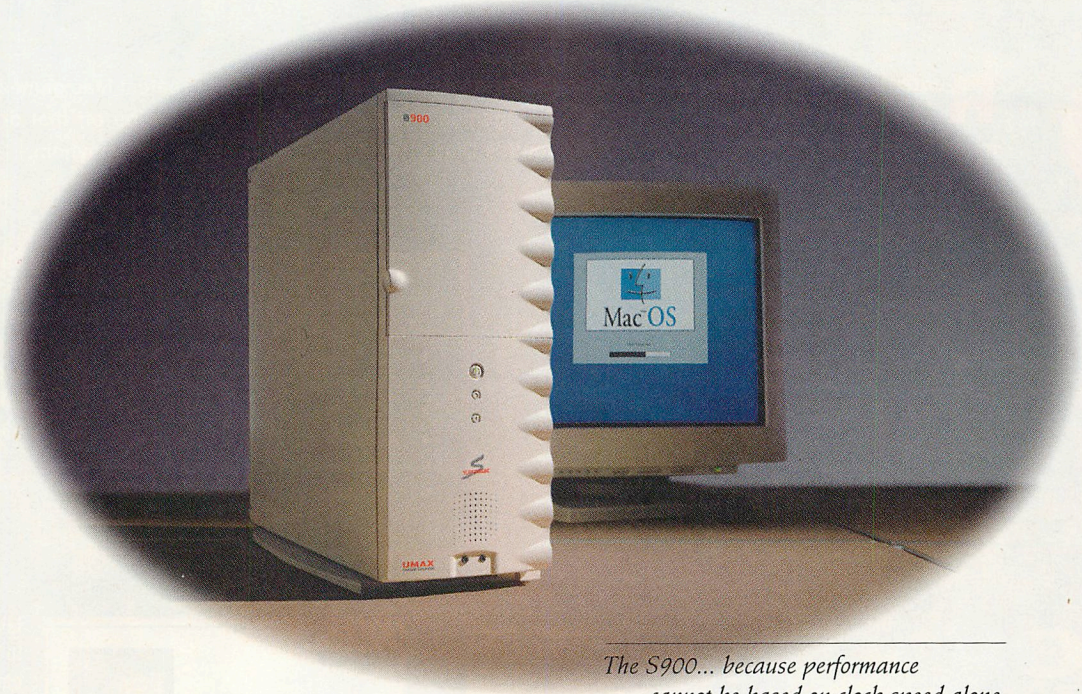
Any user "force quitting" an application with Command-Option-Escape should _immediately_ save all work in other applications and restart the Mac. Forcing an application to quit leaves your Mac in a very unstable state. —Rob Dewhirst, Farallon Communications

We have an alternative backup system to offer. Instead of paying for a Zip drive, we simply save up all the America Online intro disks we get in the mail each month and use them to back up our system. In a matter of three months, we had enough to back up our 1.5GB hard drive. —Bryan and Diana Winter

I'd like to take issue with a couple of the things you say a MacAddict would never say. "A MacAddict would never say: Let me help you configure your autoexec.bat and config.sys files." 'Scuse me? Yes he would. At the the end of the autoexec.bat file, before it opens Windows, add a couple of echoes and then:
echo How much easier
echo computing would
echo be with a
echo MACINTOSH
followed by several more echoes and a pause, so it is prominently displayed on the screen. —Eric "MonkeybranD" van Beest

More *than just* MHz!

SuperMac Computers are Better by Design.



The S900... because performance cannot be based on clock speed alone.

Why settle for clock speed alone... when SuperMac computers offer you so much more?

Not only do you get the fastest CPUs available, you also get a revolutionary new internal design that optimizes performance in lots of other ways. True workstation design... with features like 128-bit access memory and *Advanced Scaleable Processor Design* – which allows you to upgrade easily to faster processors – or even add a second processor and still keep the one you already have. So, *If you need the fastest CPU in a package that gives you the best system performance, you need a SuperMac.*

▸ ***Don't settle for anything less.***

SuperMac Family of Products

NEW! 225 MHz 604e

NEW! DUAL PROCESSOR 604e/180

MODEL	J700/150	S900/180	S900/200	S900/225	S900 DP/180
Processor Type	604	604e	604e	604e	Dual 604e
Memory Bus	128-bit	128-bit	128-bit	128-bit	128-bit
Memory Interleaved	Yes	Yes	Yes	Yes	Yes
PCI Expansion	4 PCI Slots	6 PCI slots	6 PCI slots	6 PCI slots	6 PCI slots
PCI-to-PCI Bridge	Yes	Yes	Yes	Yes	Yes
Maximum Memory	1Gbyte	1Gbyte	1Gbyte	1 Gbyte	1Gbyte
Standard Memory	16 MB	32 MB	32 MB	32 MB	32 MB
PRICE:	$ 2795	$ 3595	$ 3795	$ 4295	$ 4595

Compare! *Does your computer have these features?*

1 Standard Interleaved Memory Every S900 comes standard with interleaved memory on the motherboard for workstation-quality 128-bit access memory and best system performance. Others only provide 64-bit access memory.

2 Advanced Scalable Processor Design (A.S.P.D.) This modular configuration provides easy upgradeability to add or change processors as desired. Costs you less and is far more flexible, allowing your system to grow as you do.

3 UMAX PCI-to-PCI Bridge The S900 is the first to allow burst communication between all six (6) PCI slots, no matter where devices are inserted, for greater expandability and easy set up. Others only offer 3 slots in two separate banks at most.

MacWeek BYTE MAC HOME MacUser LABS

SUPERmac®

Computers that Work the Way You Do.

CALL 888-232-UMAX

or visit our web site @ http//www.supermac.com

© 1996 All rights reserved. SuperMac is a Registered Trademark of Radius. Licensed exclusively to UMAX Computer Corporation. ▸ Headquarters and Sales & Marketing: 47470 Seabridge Dr. Fremont CA 94538. Tel: (800) 232-8629. Fax: (510) 623-7350 ▸ Engineering Hqtrs: 4800 Great America Parkway, Ste.#200 Santa Clara, CA 95054 Tel: (408) 327-8700.

the disc

WARNING: This Month's Disc Contains Over 100 Megabytes of Killer Mac Games

Reading the mainstream press is enough to make you believe that there aren't any Mac games, much less absolutely fabulous ones. This month's Disc contains the all-time greatest Mac games from the cover feature on page 40. So wipe off that drool and pop in The Disc to install pure Mac mayhem. *—Kathy Tafel*



DEMOS
Visit the Islands of Marathon, Now Utilities, Havoc, and Stylist. You'll get a tour of the program and the Web site. No glass-bottom boats, though.

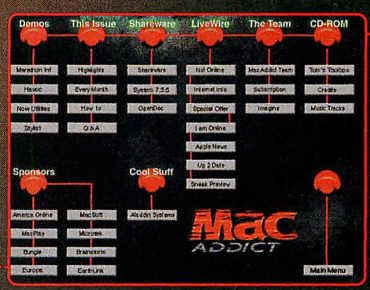


RESOURCES
Here you'll find shareware and freeware to solve almost any problem, create any file, or simply pass time with Fun and Games.





LIVE WIRE
In this section, you can connect to the MacAddict Web site to get the latest news, get links to updated programs on this Disc, and catch a Sneak Preview of the January issue.



INDEX
This screen provides a handy jumping point to every screen on The Disc.

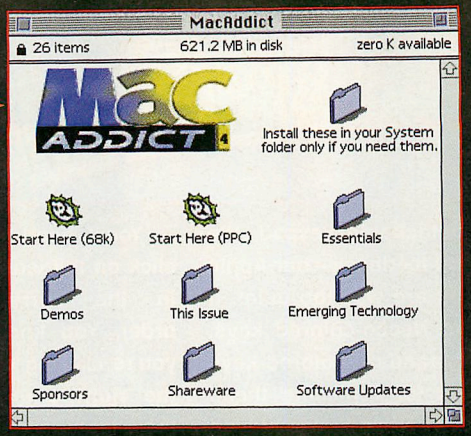


THIS ISSUE
Here is where you'll find programs and files mentioned in the magazine. Whenever you see a disc icon in print, you'll know to come here on the CD-ROM.



HELP ME!
This screen (available on the five main screens) explains in a nutshell The Disc's interface.

Getting Started



1. When you first pop in The Disc, you'll see this window.
2. If you are running System 7.5.5, you don't need anything in the "Stuff you might need" folder to run The Disc. If you aren't running System 7.5.5, then you may need some of the files in this folder.
3. If you have an older 680x0-based Mac, click on "Start Here (68K)." If you have a newer PowerPC-based Mac click, "Start Here (PPC)."
4. If you don't have enough System memory to launch The Disc, you can still access and install all of the included software and demos. Just go to the Desktop, open the folders, and browse through them.
5. Clicking on the MacAddict logo won't cause anything to open, but you can move pieces of the logo around, in essence creating your own jigsaw puzzle. Just close the window and the logo returns to normal.

Requirements

1. To access all of The Disc's features, you'll need 12MB of real RAM if you're running System 7.1 or earlier; 16MB of real RAM if you're running System 7.5 or later.
2. If you don't have enough RAM, you can still access all of the software, demos, and tutorials on The Disc from the main folder.
3. You need a 13" monitor that has a resolution of 640 x 480 and 256 colors.
4. To access the LiveWire section, you need an Internet connection.
5. You need a 13" monitor that has a resolution of 640 x 480 and 256 colors.

Help, Please!

What! You need help? Well, if your super-phat disc is mangled, warped, broken, or otherwise disturbed, you can get a replacement from IMAGINE's customer service. We've set up a special page on our Web site <http://www.macaddict.com/info/service.html> where you can order one, or you can call them directly at 415-468-4869. If you can't install anything, or get disc errors, do the same.

If you have another problem with The Disc, please stop by <http://www.macaddict.com/cdrom> before you send us e-mail. If there isn't a solution there, then please let us know about it at letters@macaddict.com.

If you're having problems with System software, we recommend calling the good folks at 800-SOS-APPL. They'll be more than happy to help you. And if you are having trouble with one of the programs on our Disc, please be sure to read the accompanying Read Me for contact info.

Our Disc Sponsors

To find immediate information from our sponsors, go to the Index (Option-click on any help screen). Or wait until you see a message from them in the lower-right-hand corner of the main screen. Clicking on the message causes a TV screen to slide down from the top of the page, showcasing more information. Sponsors can also be accessed from the main window in the Finder.

AOL

800-827-6364
http://www.aol.com
America Online offers access to the world of online news and information, interactive magazines, finance, entertainment, e-mail, free software, shopping, and more. With a point and a click, you can explore the vast resources of the Internet. Sign on and receive 15 free hours.

Bungie—Marathon Infinity and Abuse

800-295-0060
http://www.bungie.com
Marathon Infinity
Marathon Infinity contains "Blood Tides of Lh'owon," a brand-new 30-level scenario, "Forge," Bungie's own powerful Map Editor, and "Anvil," a single tool for easy modification of shapes, sounds and physics models.
Abuse
What is Abuse? Abuse is 360 degrees of side-scrolling action. Run, jump, fall, and fly in any direction through industrial corridors, caverns, and sewers. Destroy enemies in any direction with grenade launchers, rocket launchers, napalm, and nova spheres! Avoid traps with jet packs and turboboost.
Falsely accused and imprisoned in a high-security facility, you watch in horror as a mysterious biogenetic experiment turns everybody around you, guards and prisoners alike, into ravening, inhuman monsters. Your only hope: steal a suit of powered armor and any weapons you can get your hands on, and make your way to the deepest level of the prison before the plague spreads to the outside world.

Brainstorm—Drawing Discoveries

1-888-4Brainstorm
http://www.brainstormfun.com
Drawing has never been so exciting. Drawing Discoveries is a vivid, interactive, art class that teaches aspiring artists all about animals, geography, and different cultures. Guided by Akua the Gazelle, children of all ages can draw up to 15 colorful masterpieces using simple lines and shapes, and then create a personal coloring book utilizing their own designs. Drawing with either the mouse or pen and paper, this fun step-by-step approach can turn anyone into an artist, establishing the importance of creativity. In fact, you might just find yourself waiting impatiently for your turn...

Earthlink—TotalAccess

800-395-8425
http://www.earthlink.net
TotalAccess is Earthlink's complete software and Internet connection package. It includes Netscape Navigator, an award-winning Internet access software, and everything needed to register for complete Internet access in less than five minutes. After the $25 setup fee, unlimited access is provided for $19.95 per month. 'Round-the-clock tech support is provided via an 800 number.

MacPlay—Conquest of the New World

800-4MACPLAY
http://www.macplay.com
This demo version of Conquest of the New World shows off many of the major features of the game and includes a detailed tutorial plus online help. Option-click anything on the screen to find out about it, including characters, the ship, buttons, or windows. Some features have been disabled in the demo. In particular, trade and diplomacy between players are not allowed, and there are only two European players. You can't play as the native high civilization in this version. Also, the computer players have been adjusted to play very passively. Their colonies will stay small, and they will tend not to attack you.

Europa Software—WebQuick

http://www.europasoftware.com
Frustrated by Bookmarks? WebQuick(ART-tm) tracks every page you visit and automatically organizes pages by site. It lets you create custom Topics—and keeps them all at your fingertips with handy pop-up menus. WebQuick even converts existing Bookmarks. No wonder "MacWEEK" calls it "the first Web utility that is essential"!

MacSoft—Terminal Velocity

800-229-2714
Terminal Velocity is absolutely the most exhilarating flight game available for the Macintosh. It offers fast 3D texture-mapped graphics, full 360-degree flight movement, and seven weapons of extraordinary destruction. Fight your way through nine unique planets with an awesome array of spectacular air-to-air and air-to-ground combat action.

Win! Win! Win!



A fantabulously responsive Datadesk TrackBoard. This miracle of modern engineering features a trackball on the keyboard itself and has a detachable keypad. We especially liked the aural feedback—our Apple Design Keyboards are way too quiet. If you don't like the Necco-colored keys, Datadesk provides standard-colored keys and a special widget for replacing them. Here in the MacAddict offices, we played "I squish you" with it for hours. We were, however, disappointed by the lack of modifier keys (Command, Option, Control) on the right side of the keyboard.



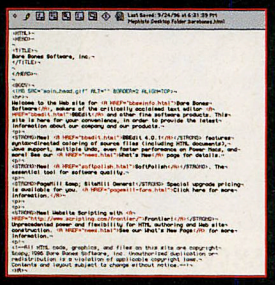
To win this contest, you won't have to enter any KILLER or BONUS codes on the CD-ROM. You will need to find the secret hotspot to PLAY OUR GAME, though. You'll need to click on the icons in the correct order. You know you're clicking on the right one if the icon stays displayed against the yellow background. If you see a solid yellow block, you've made the wrong selection and will have to start over. We will draw our winner on December 5, 1996. Check out the contest page at <http://www.macaddict.com/issues/contest.html> to see who won.

Music to our ears

Want to know who created the tracks on this month's CD? Just hold down the Option key and click on the blinking light of your music choice. Want to put your name there? We're looking for a few good tunes. Send your soundtrack creation to MacAddict, Attn: Music Mavens, 150 North Hill Drive, Brisbane, CA 94005. We'll even return your media cartridges! Soundtracks must be original material with no copyright violations. Be sure to include contact information in your package.

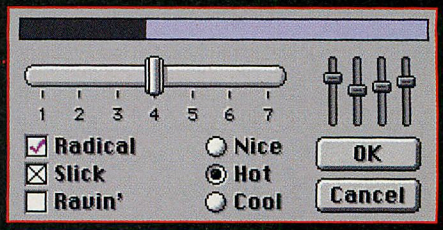
Demos

Demos give you a taste of the products you've read about or a glimpse of a killer new program. Each month we pick the four hottest demos and give them top billing. You'll find the others in the Demos folder in the Finder. The four hottest demos can be run from either The Disc's front end or from the Finder directly. The other demos must be run from the Finder. Some demos are self-running videos, while others allow you to actually use the product. Those that let you use the product are generally "crippled" in some way. For example, you generally can't save your work, and the program will probably add a "watermark" logo if you print a document.



1. BBEdit 4.0

This new version of the world's best text editor (we've pounded the Unix weenies crying, "Vi! Vi!" into the ground) adds many new features for the Web enabled. First of all, you can now save and read files directly from your FTP server. And as you can see, the HTML tags are colored. (For the programmers among you, BBEdit does this with other languages like C++, too.) Other features, such as AppleScript and a window palette, add up to a winning combination.



2. Tools Plus

Unless you're a programmer, you'll want to skip right on down to the next section. Tools Plus offers programmers a bunch of widgets (resources, libraries, and the like) to add custom interface elements—not just your standard check boxes and radio buttons—to Mac programs. Compiler not included.

3. Eric's Solitaire Sampler

This solitaire standby offers two games—Klondike and Eight Off. The full version offers 17 different games, and each game comes with its own deck of cards. The statistics tell you how long you've been playing, how many times you've lost, and your average playing time. Hint: Eight Off is much easier to win than Klondike, especially since you can't cheat at computer solitaire.



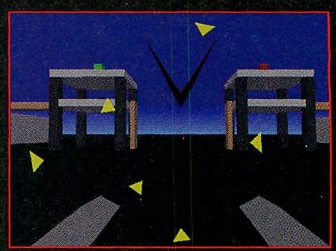
Files

We've created installers for all of the programs in the Files area. If you decide you don't want something you've installed, run an uninstaller to get rid of it. One caveat—we can track the things we put in your System Folder. For system utilities such as Aaron, we delete the extension, but not items that exist outside the System Folder. To run the uninstaller, open an installer from the front end or from the Finder and hold down the Option key—you'll see the uninstall options.

Fun and Games

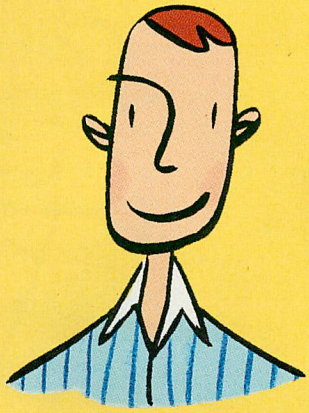
Avara

Author: Ambrosia Software
Shareware: $20



Avara is the latest arcade game from Ambrosia software. This isn't your ordinary top-down shooter,

For our Internet customers with questions, AT&T uses the most advanced technology ever known in the history of the world.



A live human being.

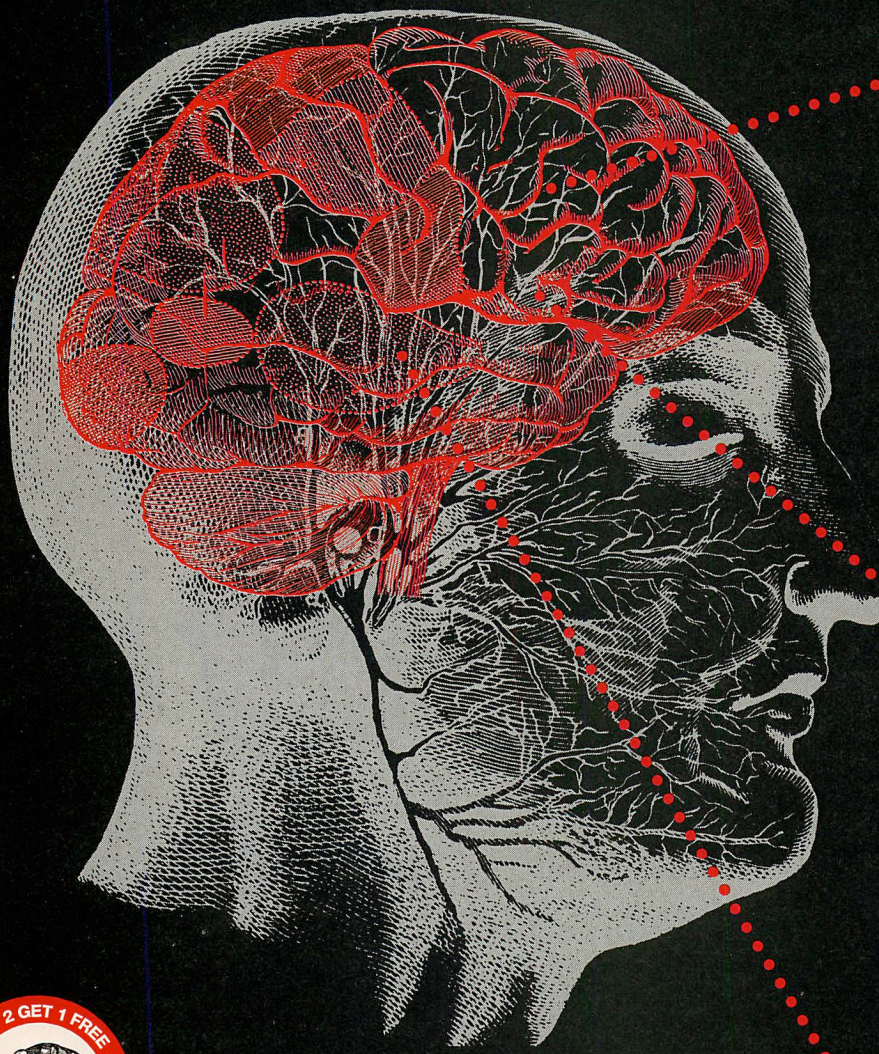
Sign up for AT&T WorldNet℠ Service and get personal customer care 24 hours a day, plus a whole lot more ☛ Fast economical access (thanks to over 200 local access numbers, each running up to 28.8 Kbps) ☛ For AT&T long distance customers, unlimited Internet access for just $19.95/mo. or one year trial where the first five hours/mo. are free* ☛ Plus, unsurpassed AT&T Network reliability.

AT&T

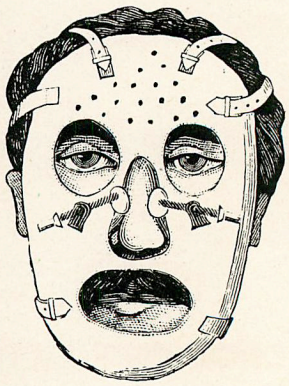
www.att.com/worldnet/wis • 1 800 WORLDNET x116 • ALSO AVAILABLE FOR MAC

* Local, long distance or 800 facility access charges to reach AT&T WorldNet Service and additional access charges or taxes that may be imposed on members or on AT&T WorldNet Service may apply to all usage. Five-hour offer limited to one AT&T WorldNet account per billed telephone number presubscribed to AT&T for residential customers and per qualified user for business customers and requires minimum of one hour of usage per month; must register by 12/31/96. $2.50 per hour charge applies after five hours. Non-AT&T long distance customers can choose from two usage plans: unlimited usage for just $24.95 per month or for only $4.95 a month get three hours of usage. ($2.50 per hour charge thereafter). Unlimited usage offer limited to one log-on per account at any time. Other terms and conditions apply. ©1996 AT&T. All rights reserved.

REFERENCE GUIDE TO MENTAL DISORDERS.









BUY 2 GET 1 FREE

GAME THERAPY

BUY 2 GAMES AND GET A THIRD ONE FREE*

For details on how to get your free game see your local participating retailer or call 1-800-432-3493 ext. M612

GT Interactive Software

www.gtinteractive.com

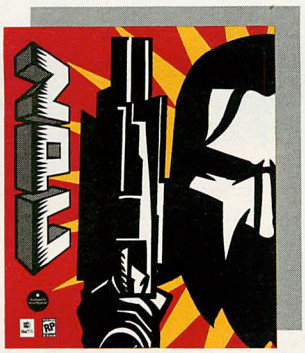
CD-ROM FOR THE MACINTOSH

*Buy any 2 titles on these pages plus the following (not shown): Doom II, Final Doom, Just Me and My Mom™, Just Me and My Dad™, Vikings: The Strategy of Ultimate Conquest, Locus, Ice and Fire and get any title FREE (plus $6.95 shipping and handling) from the following list: ZPC, Bedlam, "9", SPQR, Just Me and My Dad™, Ice and Fire, Locus. Offer expires January 31st, 1997. Availability dates subject to change. Void where prohibited. Offer open to residents of Continental U.S. Not all games available on all platforms or operating systems. For game ratings, please contact the ESRB at 1-800-771-3772.

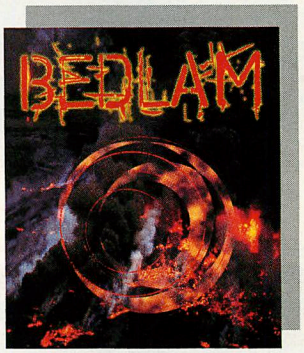
ZPC™ ©1996 Zombie LLC. All Rights Reserved. Produced and developed by Zombie LLC. Bedlam™ is licensed from Mirage Technologies (Multimedia) Ltd. ©1996 Mirage Technologies (Multimedia) Ltd. All Rights Reserved. Hexen™ ©1995 Raven Software Corporation. All Created by CyberSites, Inc. Macintosh® is a registered trademark is a trademark of Apple Computer, Inc. All games distributed by GT Interactive Software Corp. All trademarks are the property of their respective companies.

IMPULSE-CONTROL DISORDER:

Episodes of failure to resist aggressive impulses that result in serious assaultive acts or destruction of property.



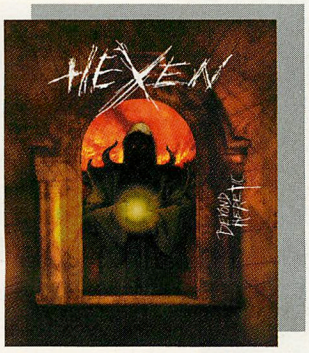
A.k.a- I'll do what I want, when I want. Here we see not just violence but ultra violence. This intense action thriller places the player in an evil futuristic dictatorship. Recommended treatment: straight jacket and a padded cell.



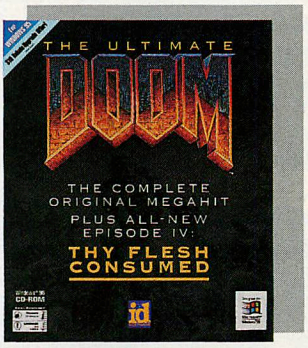
Pray you never see a case this bad. We're talking 3D, blastfest arcade action. Here the player/patient blows up virtually everything in sight in order to save the Earth. A frontal lobotomy may be in order.

ANTISOCIAL PERSONALITY DISORDER:

A pattern of disregard for and violation of the rights of others.



Perhaps the most disturbing issue here is that this is one of the best-selling games of 1995. In order to destroy the treacherous Serpent Rider the player must jump, fly, throw lightning bolts, or even cast evil spells. Physical restraint may be necessary.

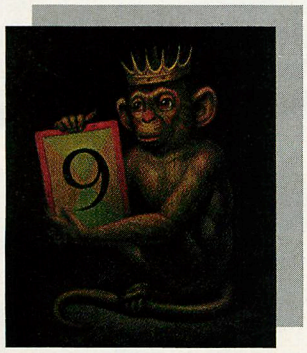


You don't get any more antisocial than this. Nonstop, shoot em-up action with beefed-up graphics and sound that help you blow away demons like never before. Treat with extensive psychotherapy.

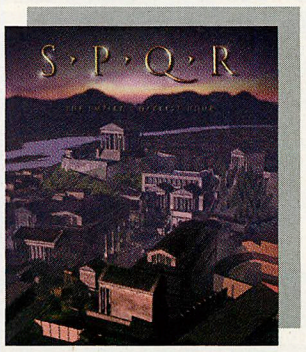
DISSOCIATIVE FUGUE:

(FORMERLY PSYCHOGENIC FUGUE)

Sudden, unexpected travel away from home or one's customary place of work, with inability to recall one's past.



The player is off to the barren artistic retreat of a late eccentric designer, where they must restore the resort to its original grandeur, solving brain-numbing puzzles along the way. The players could be gone for months at a time.



This is an extreme case. The player not only travels to another place but also to another time. (Ancient Rome, 205 A.D.) An evil plot to destroy the empire is underway and the player must stop it. These people are beyond help.

Rights Reserved. Published by id Software, Inc. Ultimate Doom™ ©1995 id Software, Inc. All Rights Reserved. 9™ ©1996 Tribeca Interactive, Inc. All Rights Reserved. Created and published by Tribeca Interactive, Inc. S.P.Q.R.™ ©1996 CyberSites, Inc. All Rights Reserved.

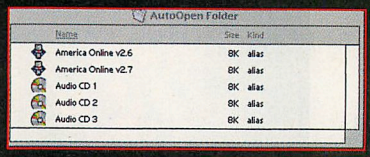
though—Avara is a full-blown 3D game that feels a lot like MechWarrior II. A lot. With immersive sound and more surreal rendering, it would practically be a clone. For all its cartoonlike colors, Avara is very fun to play and has a great physics model.

System Utilities

This month we turn this section over to utilities maven Stefan Anthony, who has a control panel or extension to cure whatever ails you.

AutoOpen

Author: Steven D. Splinter
Shareware: $5



AutoOpen is a shareware extension that provides an intuitive way to automatically open applications and perform system tasks when you pop in a CD.

AutoOpen works not only with CD-ROMs but also with other types of storage media—such as floppies and networked volumes. Once installed, AutoOpen creates a new folder named "AutoOpen Folder" in your System Folder. AutoOpen quietly sits in your Extensions folder and watches your Desktop. If a volume is mounted on the Desktop, AutoOpen will check the AutoOpen Folder to see if it contains an alias with the same name as the volume that just appeared on the Desktop. If one is found, the alias (which is pointing to whatever file, folder, or application you specify) is opened.

Confused? Try this: Place an alias of your favorite audio CD player (Audiodeck in this case) into the AutoOpen Folder, and name it "Audio CD 1". Whenever you insert an audio CD into your CD-ROM drive, AutoOpen will open the "Audio CD 1" alias, which in turn opens Audiodeck. Slick! (Add aliases for Audio CD 2, Audio CD 3, etc. if you listen to many CDs in one sitting.)

NamedFolder7

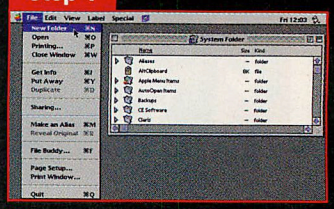
Author: David Sumner
Freeware

Imagine working in the Finder and you want to create a new folder. If viewing a folder's contents by Name and looking at the top of the window, creating a new folder will make the Finder automatically name it "untitled folder" and place it at the bottom of the list. You have to scroll down, rename it, and then scroll up again.

Bypass this Finder nuisance with NamedFolder7. This freeware utility adds the ability to name new Finder folders.

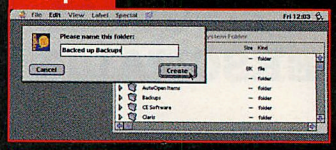
—Stefan Anthony

Step 1



Whenever you select "New Folder" in the Finder's File menu...

Step 2



... NamedFolder7 presents a friendly dialog box allowing you to name the folder before it is made.

This Issue

Here's the deal. Each time you see the disc icon in the rest of the magazine, you'll know to look in this section of The Disc to find shareware, freeware, and demos. Here's how it works. The This Issue screen on The Disc is divided just like the magazine's Table of Contents. So if you're looking for one of the games in the cover story, look for it in the Highlights section. If you're looking for one of the utilities that Owen Linzmayer mentions in the Ask Us column, use the Ask Us installer. To catch a demo of a product reviewed in the magazine, use the Reviews installer.

Highlights

Who won the Macs?



Roberto Muñoz's Acid Column was one of our faves.



Brian Cooper's desktop *almost* made it.

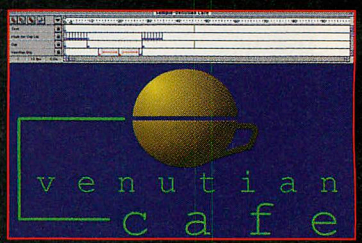
Turn to page 50 to see who won the custom-painted Macs, then pop in The Disc to see many of the winning entries and contenders from the five categories: Desktop Design, Web Page, System Sound, QuickTime Movie, and Graphic. Pictured here are contenders from the Desktop and Graphic categories.



OpenDoc

What's up with OpenDoc? David Reynolds talks about the up and coming parts, excuse us, Live Objects, on page 54. Pop in The Disc for the latest versions of OpenDoc, Cyberdog, and third-party objects. Here we're using OpenDoc 1.1 to embed a Cyberdog navigator and C-Graph object into the WAV word processor (Say what? You'll have to check out The Disc to find out). We used art from the Scrapbook to make the graph.

Reviews



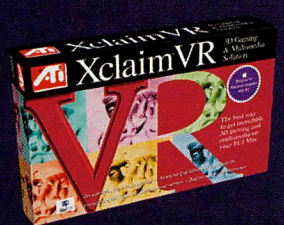
This vector-based animation program, FutureSplash, doesn't just make animations. You can export the files for the Web, too. The Navigator plug-in is available for anyone to download so that they can see your animations. The demo of FutureSplash on The Disc features a complete tutorial, so you can really test whether you want it or not.

NEW ATI XCLAIM VR.

It's more graphics upgrade than you've ever seen on A SINGLE CARD.



Bring your PCI Mac roaring into the multimedia age with new ATI XCLAIM™ VR, the only graphics upgrade combining five must-have functions in one product. **MAC2TV Video Out:** Plug your MAC into your big screen TV for in-your-face, arcade-style game playing and riveting full-screen presentations. **Video In:** Capture frames and QuickTime movies from your VCR or camcorder, and use them in other documents. **QuickTime Acceleration:** At last, you can get truly usable, full-screen, full-motion QuickTime video playback. **QuickDraw 3D Acceleration:** See richly textured 3D, rendered at blinding speed, for amazing gaming action and incredible VRML Web browsing. **2D Graphic Acceleration:** Get screen resolutions up to 1152x870. See up to 16.7 million brilliant colors. Turn your PCI Mac into an amazing graphics and multimedia powerhouse with new ATI XCLAIM VR. It's just $269.* See your dealer today. Or check out all the details at www.atitech.ca.



NOW YOU SEE IT.™

© ATI Technologies Inc., 1996. ATI, XCLAIM and NOW YOU SEE IT are trademarks and/or registered trademarks of ATI Technologies Inc. All other company and/or product names are trademarks and/or registered trademarks of their respective manufacturers. *Based on US suggested retail price of 2MB version at time of printing. Dealer may sell for less.

Live Wire

This month, instead of a fake browser, we've put in a real browser. Now, before you accuse us of signing a deal with the devil or anything, we'd just like to say that Microsoft's Internet Explorer was the easiest browser to get permission to use in this way. The standard LiveWire Apple News, Update, and Sneak Peak buttons will open those pages in the browser. Because this is a new way of doing things, we still have a few kinks to work out.

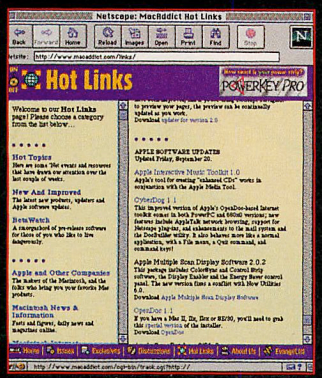


You will need to quit Explorer before opening a new link. So basically, just quit when you're finished surfing in a particular section. There is one caveat: if you don't have enough RAM to run both the "Start here" application and Internet Explorer at the same time, you'll get a -108 error.

The benefit of using this new technology is that in addition to the regular LiveWire fare, you'll be able to get to Web sites from other areas on The Disc, such as the demos, sponsors, and contest screens. And, your computer will no longer crash if you aren't connected—we still need to clean up that sign. So you don't need to freak out about that.

The Web Site

This month, we fearlessly delve into a tricky subject: finding the latest Apple System software updates. As you might guess from poking around the company's many Web pages, Apple Computer isn't a firm believer in centralization, and this is particularly true of its approach to delivering software updates such as the recent QuickTime 2.5, System 7.5.5 Update and so forth.

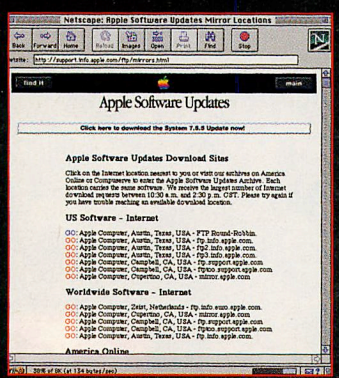


The quest begins here, but knowing isn't even half the battle.

In Search Of...

Before you can round up the latest Apple goodies, you first need to discover that they exist. We track the latest Apple software updates in the Hot Links section of the MacAddict Web site, <http://www.macaddict.com links>, with brief descriptions and pointers to a relatively robust download site; you'll find the release-ready software under New and Improved, while public betas and unsupported hacks are relegated to the BetaWatch page.

Apple does maintain its own list of recent software updates, at <http://www.support.apple.com/pub/NEWFILES.html>, but this page has the unfortunate flaw of being hosted on one of the download servers. Thus, when the download server is overloaded the page becomes inaccessible.

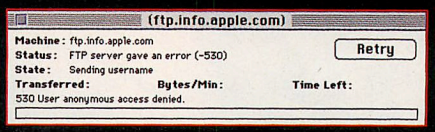


You may be thinking, "Did the admin post it to five FTP sites or six?" Ask yourself: "Do I feel lucky?" Well, do ya, punk?

Search and Destroy—Oops, Install

Okay, so you've found out about a bug fix or cool freebie, and now you want to get it. This is where the fun really starts.

Apple has several FTP servers to distribute software updates, many of which are organized differently or updated later than others. The first server to be updated is usually ftp.info.apple.com, where U.S. software updates are archived under <ftp://ftp.info.apple.com/Apple.Support.Area/Apple_SW_Updates/US>. Even on a good day, this server is slow and overloaded; when a hot new software update ships, its 200 available connections are always maxed out.



Take a moment to bang your head against the wall, then try, retry again.

Usually, within a day or two the contents of ftp.info.apple.com are replicated on ftptoo.support.apple.com (150 connections), ftp2.info.apple.com (200 connections), and ftp3.info.apple.com (80 connections). While ftp2 and ftp3 suffer from similar problems during peak times, for the most part they're pretty easy to reach—probably because they're not widely known. Oh well, guess we just blew it.

If you're prepared to wait, everything should eventually end up on Apple's dedicated "mirror" site, mirror.apple.com (see under <ftp://mirror.apple.com/mirrors/Apple_SW_Updates/US>). This server, hosted on a Unix-based Apple Network Server, can support 300 connections, serving up hordes of files from popular software archives such Info-Mac and UMich without even breaking a sweat.

Emergency Measures

So, that's all well and good when you're in no hurry and you're not competing with thousands of rival software junkies. What about those times when you have to get your mitts on the System 7.5.5 update, and so does every other Mac addict in the world?

In times of crisis, Apple will usually solicit help from third parties. Look to the MacAddict site for late-breaking information on these emergency third-party mirrors. Typically, there's also a phone number you can call to order the major update du jour, though Apple sometimes hits you up for a shipping-and-handling fee.

Then there's the commercial online service option. No matter what you think of America Online, you'll be glad the service exists when you avail yourself of its easy-to-use, easy-to-access library of Apple software updates.

Last but not least, you could be patient. Wait a few weeks and we'll deliver the latest system software updates to you on one of our shiny, pleasant-smelling CD-ROMs, just like we are this month. —*Mark Simmons*

3 OUT OF 4 GAME CHARACTERS SURVEYED

would rather humiliate and destroy you while playing on a MAC with an

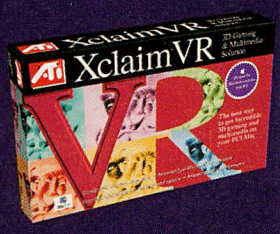
ATI XCLAIM VR

graphics upgrade.



And that's just because that one last QuickDraw 3D game goon hasn't seen what this sucker can do. How its MAC2TV feature lets you plug your Mac right into your TV for the ultimate big screen spine-chiller that blows away arcade games once and for all. How its new ATI 3D technology breathes life into everything on screen. With face-blasting speed, butter-smooth 3D detail and full-screen QuickTime video. Oh ya, just in case your left brain demands some sensible reason to run right out and get one, XCLAIM™ VR does mean business apps, too. And in-your-boss's-face big screen presentations. And video capture from camcorders and VCRs. And VR on the Web. And because it's really five upgrades in one, you get more performance and features than a Power Mac 8500. On the other hand, XCLAIM VR costs just $269,* so chill out! See your dealer, or see more about it at www.atitech.ca.

MAC2TV



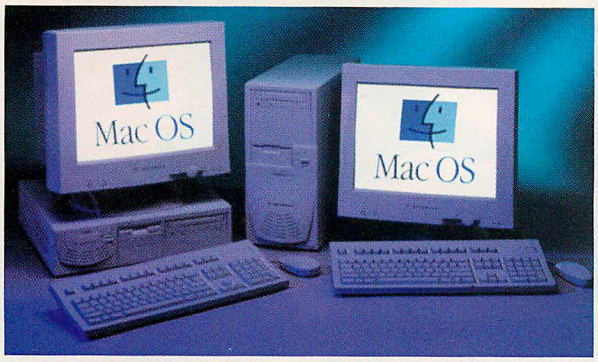
NOW YOU SEE IT.™

© ATI Technologies Inc., 1996. ATI, XCLAIM and NOW YOU SEE IT are trademarks and/or registered trademarks of ATI Technologies Inc. All other company and/or product names are trademarks and/or registered trademarks of their respective manufacturers. *Based on US suggested retail price of 2MB version at time of printing. Dealer may sell for less.

get info

News, trends, and other very valuable information that you will want to know.

Motorola Macs: License bears fruit



KING KONG CLONES! StarMax counts on Motorola clout.

Besides becoming the 800-pound gorilla of the Mac clone world overnight, Motorola had other goals when announcing two new Macintosh-compatible computer lines in mid-September. The StarMax 3000 line (roughly equivalent to Power Computing's PowerBase line) and the StarMax 4000 line (roughly equivalent to the PowerTower Pro line) will—if the pager, phone, and PowerPC company gets its way—create Mac inroads into the corporate world and push Mac clones into China's expanding market.

Motorola, gambling on its reputation, its new PowerStack II servers, and its five-year warranty, will try to push StarMax Macs onto corporate desktops as part of a "total solution" combining PowerStack II servers (running Windows NT 4.0) and StarMax clients. By presenting corporate buyers with packages, Motorola hopes that the Mac will become more attractive to them.

Motorola has lined up numerous distribution deals, so getting your new StarMax shouldn't be a problem. Look for StarMax computers to start appearing in catalogs, retail outlets, and in China. That's right. Motorola will also court the rapidly expanding Chinese market via a distribution deal with Panda Electronics, a well-known Chinese electronics company.

In addition to making its own line of computers, Motorola also has the right to sublicense the Mac OS and the motherboard designs to other companies (see "Mail-Order Macs?"). This may also expand the clone market. Vendors will be able to sell Mac compatibles without having to deal directly with Apple.

One of Motorola's mantras in the quest for a larger Mac market is "low cost, high volume." For the most part, the StarMax line is pretty standard for Macs, including either a 603e or 604e processor running at 160 or 200MHz, 16 or 32MB of RAM, three or five PCI slots, a 1.2 or 2.5GB hard drive, a 256K L2 cache, and an 8X CD-ROM drive. StarMax differs from the Mac standard with its philosophy of cutting costs while still creating high-volume products. The StarMax line is based on the Morocco/Tanzania motherboard, codesigned by Apple and Motorola for use by Motorola and its sublicensees. This design has only three DIMM slots, putting maximum RAM at 160MB. The processor is soldered to the motherboard (another cost-saving feature), so it can't be upgraded later. Video output for the Motorola Macs is via an SVGA-only port. If you want to use your Apple monitor with your StarMax, too bad. You'll have to buy a $15 adapter to do so. In a bow to lower-cost alternatives, the StarMax design includes ports for PS/2 keyboards and serial mice (in addition to standard ADB ports), and in a bow to lower industrial design costs, StarMax cases are inexpensive, reminiscent of PC designs.

Not that Motorola believes that the StarMax lines are cheap. On the contrary, the company offers a five-year warranty as a standard StarMax feature: for the first year, Motorola offers on-site support; for the second and third years, the company provides a return-to-depot policy; and for the fourth and fifth years, the company provides a return-to-Motorola repair policy. Also included is 90 days of telephone technical support. This is, hands down, the best warranty in the business. StarMax prices range from $1,595 (street) for a low-end 160MHz 603e-based Mac to $3,595 for a high-end 200MHz 604e-based Mac. These prices compare well with similar Power Computing Macs.

Can Motorola increase Mac market share? Maybe. The company believes that the combination of NT servers and Mac-compatibles on the desktop will help gain corporate ground, but that's never been a big market for the Mac, and it will probably never be much larger than it is now. Best of luck, Motorola, but we remain skeptical. As for home users, the StarMax prices are good, the warranty is great, the performance is strong, so why not buy Motorola? The company has kept its end of the bargain by providing low-cost Macs; it's just waiting for high volume. —*DR*

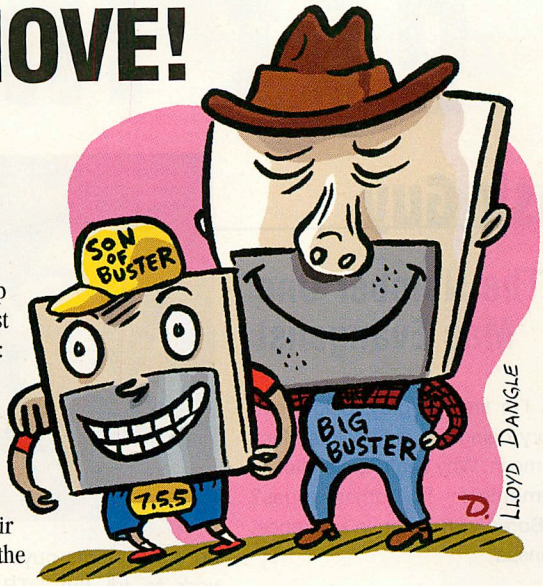
PUTTING ON PRESSURE

While Motorola is looking for high-end, small office, and corporate users, UMAX is taking on Power Computing for the title of Cheapest, Fastest Mac. By adding a 225MHz 604e chip to its SuperMac S900 and pricing it at $4,495, UMAX is putting pressure on Power Computing to raise the megahertz or lower the price on its Mac products. With a speed that only the computer industry can muster, Power Computing will probably respond within a few months.

This is an example of why the licensing of the Mac OS is good for those who buy Mac. With four Mac manufacturers in the market, the revered-by-capitalists market force of competition starts to work in favor of purchasers by driving prices down, performance up, and new technologies forward. Apple has long needed some competition to keep trim and fit. It's like exercise in that regard; it's painful to do, but it works wonders when done regularly. —*DR*

BUST A MOVE!

System 7.5.5 is Here!



Buggin' out at System 7.5.3? Pop in The Disc and install the latest version of System software: version 7.5.5 (code named "Son of Buster"). What happened to System 7.5.4 that we wrote about last month? Fortunately, Apple discovered a last minute bug, er... feature, that shouldn't have been there. In keeping with their saner naming scheme, it bumped up the version number to 7.5.5.

This update improves the reliability and performance of all Macs running system software version 7.5.3. If that's the version you've got, update it. If you're running any other System 7.5 flavor, you have to run the System 7.5 Update 2.0 (also on The Disc) first.

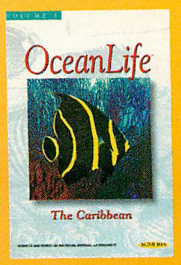
Using System 7.5.5, we found that virtual memory worked almost as well when turned on as when turned off. If you use OpenDoc, we recommend using virtual memory. If you're a regular virtual memory user, you'll note that it's much faster to launch memory-hungry programs and switch between large applications or programs.

This update also eliminates the cause of one Type 11 error. (We found that after installing the update, Netscape Navigator 3.0 crashed with Type 10 errors in the same places it used to crash with Type 11 errors. We suspect some fancy subtraction routines are involved.)

You will find that programs use slightly more memory—23K. So if a program tells you that you don't have enough memory, give it more RAM by selecting the application, pressing Command-I to open the Get Info box, and up the amount of RAM by exactly 23K in the Preferred size box. —*KT*

get info

EYEBALL THE ICONS AND WIN SUMERIA LOOT



Not long ago, the only things that appeared in the Mac's menu bar were the names of the menus in text, bracketed between the icons for the Apple and Applications menus. Now the space between the rightmost menu and the Applications menu icon is crowded with icons, each hiding its own little menu. Match the following icons with the extensions and control panels that place them in the menu bar to win Sumeria's Oceanlife series. Submit your entry by December 10, 1996 to our Web site or "Menu Quiz," MacAddict, 150 North Hill Drive, Brisbane, CA 94005.



1. Apple
2. Application
3. Balloon Help
4. Conflict Catcher
5. Magic Menu
6. MS Office Manager
7. Now Contact
8. OSA Menu
9. QuickKeys
10. WebQuick



FIND SYSTEM 7.5.5 in the software updates section of The Disc.

MAIL-ORDER MACS?

APS clones Motorola's Mac clones

If you saw the Michael Keaton film "Multiplicity" over the summer, you'll be ready for the newest kid on the Mac clone block—APS Technologies. The company is sublicensing the Tanzania board from Motorola and will ship clones—labeled M-Power—that are almost identical to Motorola's new StarMax line. Clones of clones, so to speak. The M-Power Macs will use the same motherboard, components, and case as the StarMax line. The only differences between the two clone lines are front panels and prices.

This is where things get good. The M-Power line will have four offerings, all based on the 603e chip (except for the high-end tower, which uses a 604e chip). The first is a build-your-own-Mac system for $995, which has no CD-ROM drive, no hard drive, and no RAM. Although this sounds funny at first, it's a boon for those who already have some (or all) of the components and want to upgrade, or those who may not need certain features (such as a floppy drive or CD-ROM drive). This allows you to custom-configure your system by buying only what you need.

The three other configurations are pretty standard, all shipping with 8X CD-ROM drives, keyboard, mouse, and floppy drive. Here's exactly what they offer:

- For $1,399, you get a desktop 160MHz 603e with 16MB of RAM, 1.2GB hard drive, and 1MB of VRAM.
- For $1,599, you get a desktop (or tower, for a little more money) 200MHz 603e with 16MB of RAM, 1.2GB hard drive, 256K L2 cache, and 1MB of VRAM.
- For $2,599, you get a tower 200MHz 604e with 24MB of RAM, 2.5GB hard drive, 1MB L2 cache, and 2MB of VRAM.

Any M-Power Mac can have any product sold by APS added on when purchased, and all ship with a one-year warranty covering parts and service. Long known as a mail-order source for peripherals, APS has long had a hankering for making Macs but has been unable to come to a Mac OS licensing deal with Apple. Through Motorola's licensing agreement with Apple, APS will achieve its dream and become the first sublicensee to produce Mac clones. Because over half of APS' revenue comes from corporate customers, the M-Power Macs might make business desktops. At presstime, APS was set to ship the new M-Power line on November 15, with M-Power Macs available in quantity by January. —*DR*

NEW FOR THE MAC

DANCER

(PaceWorks: 415-855-0900; http://www.pacworks.com; $445 (srp); ships by the end of 1996)

The agile Dancer lets you combine elements from popular programs, such as Photoshop, Director or LightningDraw, into an animated presentation complete with sound. Animations can be saved as GIF89, QuickTime movies, and Java applets. Dancer takes advantage of TrueType GX, so animators have access to high-end effects.

PHOTOPC 500

(Epson: 310-782-0770; http://www.epson.com; $499 (street); ships November)

The PhotoPC 500 is smaller and stores more images (30 high resolution; 60 standard resolution) than its predecessor, the PhotoPC. An optional PC card allows you to take 100 high resolution images and 200 standard resolution images. Other goodies include: an optional LCD display for viewing images, improved sharpness, and red-eye reduction.

D-200L AND D-300L DIGITAL CAMERAS

(Olympus: 800-647-4027; http://www.olympus.com; $599 and $899 (street); ships October and November)

These two small, lightweight cameras offer 24-bit color, an LCD display that can be turned off to extend battery life, auto-flash, auto white balance, and red-eye reduction. The D-200L stores 20 high-quality images and 80 standard ones; the D-300L stores 30 and 120 images respectively. The D-300L also includes auto-focus.

LIVE PICTURE XT

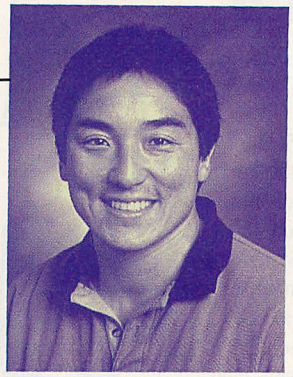
(Live Picture: 800-724-7900; http://www.livepicture.com; $149 (street); ships October)

Use Live Picture XT to position, crop, zoom, and rotate high-resolution images in QuarkXPress without sacrificing image quality. You can also use Live Picture XT to create color separations in QuarkXPress and to sharpen images after you determine the final image size.

get info

Ask Guy

The Number One Mac Evangelist



Q. I'm tired of gray, beige, and ivory being the only colors Macs come in. Why can't Apple offer its computers in other hues? —Bored with Beige in Lawrence, Kansas

A. What do you mean? PowerBooks are black. And a few of them were even flame-colored.

Q. I just went over to a friend's house. He has Win 95 on a new IBM clone. It seemed so much better than my dear PowerPC. Tell me that it is all superficial and that Mac is still the best. —jup

A. "It is all superficial and Mac is still the best." Next time you go over, take a hybrid CD-ROM and try to use it on his machine. Then write me back.

Q. I'm in the process of convincing our systems guys where I work to let the DTP group switch to the Mac OS. We've got everything in place, aside from the proof that the Mac has the larger percentage of the marketshare in the DTP industry. I've searched all over the Web, but cannot find a site with actual percentages. Not even Apple could help. Do you guys know of any such sites? If so, please e-mail the URL to me as soon as you can. —Kirk Hiner

A. Unless you're a business publication trying to prove that Apple is going out of business, it's very difficult to provide exact numbers. It depends on how you define DTP. If it's high-end publishing, we probably have 60 percent market share. If you want to try an interesting poll, go ask any commercial printer what percentage of their color pre-press files are Macintosh. You'll find it's about 85 percent. Some printers, in fact, charge more for handling Windows files. Anytime you want more information about Macintosh and publishing, come to <http://www.evangelist.macaddict.com/market_publishing.html>.

Q. So you think you're Mac Addicts, huh? Well, pop-quiz hotshots, what does Mac stand for? Yeah, I know it's an abbreviation for Macintosh, but I just thought the following was neat; MAC=Most Awesome Computers. —Chris Doorley

A. Take your pick: Mavens Always Choose or Morons Always Criticize.

Open Transport Demystified

What do you do when you've developed one of the most network-friendly computers in history? If you're Apple, you start over to make it better. Open Transport is a ground-up rewrite of the Mac's networking software. And with so much attention focused on the Internet, it couldn't have arrived at a better time. The Mac's original TCP/IP software, MacTCP, was integral in getting Macs onto the Internet early. But it placed strict limitations on the number of simultaneous connections a Mac could accept. Furthermore, MacTCP's interface is relatively clumsy, and requires you to restart before new settings can take effect.

Open Transport is fully PowerPC-native, and allows Apple to add new protocols easily. For example, Open Transport has already been demonstrated running IPv6, the next generation of TCP/IP. Changes can be made on the fly and configurations for different Internet Service Providers can be saved and even exported for use on another Macintosh. Apple is using Open Transport to develop its first homegrown PPP client software for the Mac. Eventually, Open Transport will also provide multihoming, the ability for a Mac to be on two separate networks at once.

Say you're not wired yet? That's OK. Open Transport can even help those using good old AppleTalk, the Mac's native network protocol. Technoweenies can easily see all the numeric address information that AppleTalk normally hides, and a simple pop-up menu lets you switch AppleTalk support from your printer to modem port. The latest version of Open Transport is 1.1.1.—*Ross Scott Rubin*

Play solo...or go on the Internet and kick the crap out of snotty PC owners.



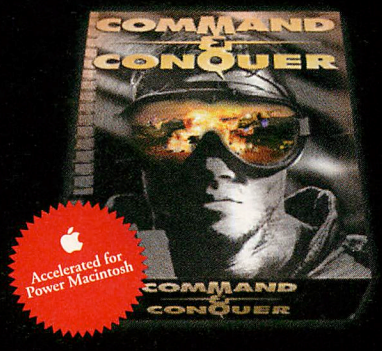
COMMAND & CONQUER™

The strategy game that redefines Macintosh gaming.

OVER A MILLION UNITS SOLD WORLD-WIDE.



Over 40 missions
on two CD-ROMs





Dozens of close-ups
and action movies

Westwood™ STUDIOS

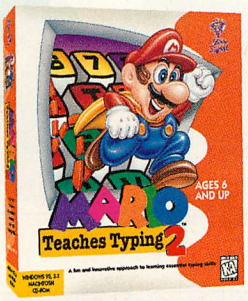
www.westwood.com

Command & Conquer is a trademark of Westwood Studios, Inc. Macintosh is a registered trademark and Power Macintosh is a trademark of Apple Computers, Inc. © 1995, 1996 Westwood Studios, Inc. All rights reserved.

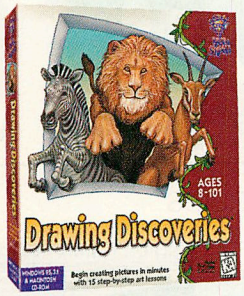
More than fun and games, skills to last a lifetime!

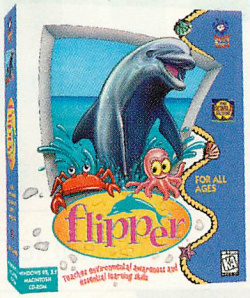


Mario Teaches Typing 2 and Mario's FUNdamentals are TM & ©1996 Nintendo/Interplay Productions. All rights reserved. Mario, Yoshi and Koopa are trademarks of Nintendo. All rights reserved. Chess Mates and Drawing Discoveries ©1996 Presage Software Development. All rights reserved. Chess Mates and Drawing Discoveries are trademarks of Interplay Productions. All rights reserved. Chess Mates developed and designed by Stepping Stone, a division of Presage. Flipper TM & ©1996 The Flipper Group. All rights reserved. Brainstorm and Interplay are trademarks of Interplay Productions. All rights reserved. Win ® 95 is a registered trademark of Microsoft Corporation. All rights reserved. All other trademarks are the property of their respective owners.

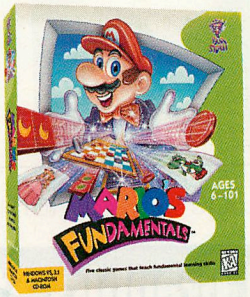


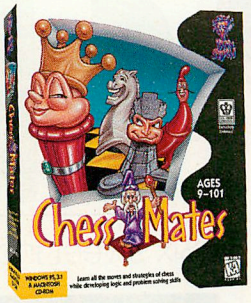
National Parenting Center Seal of Approval





Based on the Major Motion Picture





Endorsed by the US Chess Federation

Introducing **Brainstorm**, a new line of software titles that are not only fun and entertaining but also stimulate children to think and to discover! With **Brainstorm**, your kids will experience exciting ways to enhance their logic and problem solving abilities, build their self-esteem and stimulate their creativity. But they'll be having so much fun, they won't even know they're developing skills they'll use forever.

The fun starts with Mario in **Mario Teaches Typing 2** -- the sequel to the bestseller that teaches essential typing skills in a fun and innovative way. Then, in **Chess Mates** --exclusively endorsed by the U.S. Chess Federation -- animated characters will have kids mastering the intricacies and strategies of chess like the fork, skewer and pin in over 60 fun puzzles. With **Drawing Discoveries**, those who thought it impossible will learn to draw in minutes with step-by-step lessons that can turn anyone into an artist. With **Mario's FUNdamentals**, your kids get five classic strategy games that teach fundamental learning skills. And in **Flipper**, the world's smartest dolphin will lead kids on adventures sure to inspire a sense of wonder about the world around them.

At **Brainstorm**, we know that games can be much more than just fun. Now, they can reward your children for life.



So much fun, they won't know they're learning!

LICENSED BY Nintendo

DEVELOPED BY Stepping Stone BUILDING SKILLS FOR LIFE

THE BUBBLE FACTORY

Mac™OS

COMPATIBLE Windows 95 COMPATIBLE

Designed for Microsoft® Windows®95

KIDS TO ADULTS AGES 6+

BRAIN STORM™

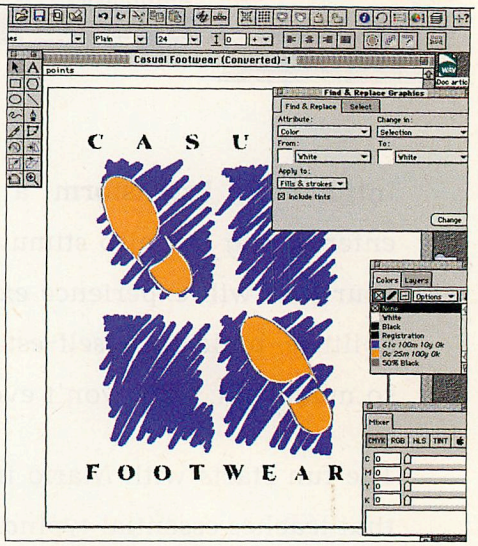
Brainstorm •16815 Von Karman Ave. •Irvine, CA 92606 •www.brainstormfun.com

cravings

Six sweet indulgences to tempt your digital fantasies.

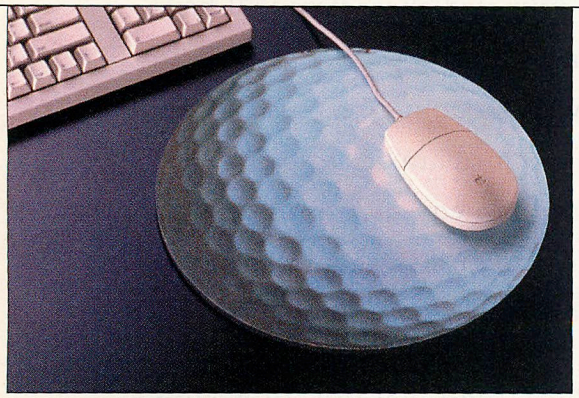
FreeHand Graphics Studio

Macromedia



Go to seven. Go directly to seven. Pass six. Hopefully collect lots of dollars. Macromedia must have pulled this card off the top of the Community Chest pile when thinking about the new version of FreeHand. Being the upstanding board-game players they are, Macromedia's team dutifully followed directions and produced FreeHand 7.0 as part of the FreeHand Graphics Studio. (Don't bother looking for Freehand 6; it never made it to Go.) The new FreeHand hopes to ride the Web wave by including Shockwave support. FreeHand can also embed URLs and can export to GIF, JPEG, PNG, and Acrobat PDF file formats. FreeHand 7 also offers better autotracing, a powerful graphics and text search engine, and a bevy of other new features. If your thimble lands on the Macromedia square and you pay the $449 rent (street price) for Graphics Studio, you'll also get xRes 3.0, Extreme 3D 2.0, and Fontographer 4.1 To learn more, call 800-457-1774 or go to <http://www.macromedia.com>.

SOFTWARE SO GOOD IT SKIPS A VERSION NUMBER



Mousepads

Computer Rascals

Those wacky Computer Rascals have developed a Mac accessory that makes a statement about the human condition. They're cheesy. They're ballsy. They represent the perfect balance between heaven and earth. And best of all, they're only $14.95. The round Computer Rascals mousepads come in seven different varieties. There's a pizza pad, five different ball pads (including a golfball, a soccer ball and a basketball) and a yin-yang symbol. Computer Rascals' mousepads are similar in construction and feel to existing mousepads; it's their appearance that makes them nifty. Since they're round, Computer Rascals Mouspads also make an ideal indoor, Frisbee-like flying disc when your Mac isn't powered up. They're furniture- and window-safe, and easy on those delicate breakables (provided you don't chuck them too hard). To buy your very own under-mouse statement, call 800-545-6721.

CHEESE FOR YOUR MOUSE.

MD-4000

Alps

You've run out of addresses. Your power strip can't take one more cord. If you send out the wrong mental vibrations, your system will go down in a cloud of burning smoke. But before you enter that 12-step SCSI junkie program, consider extending your peripheral habit with the Alps MD-4000 scanner/printer. It only takes one SCSI address and one socket on your power strip. Besides those all-important features, the MD-4000 also offers 600 dpi TWAIN-compatible 24-bit scanning and 600x600 dpi color printing (or 1200x600 dpi black-and white printing). With its new Micro Dry ink system, the MD-4000 delivers rich, near-photographic quality prints that won't fade, smudge, or run if you get them wet, and it delivers all this on regular 20-pound bond paper--no special ink-jet paper to purchase. The MD-4000 is also capable of printing overheads or doing metallic color printing. At $6.60 for regular ink cartridges and $8.99 for metallic color cartridges, buying ink won't break you. And the MD-4000 won't break you either with its $699 list price. For more information, call Alps Electric at 800-825-2577, or go to <http://www.alpsusa.com>.

THE LITTLE PERIPHERAL THAT COULD



Flight Sim Cockpit

Thrustmaster



Glued to the tube during the Gulf War dogfight sequences? Bummed because you missed out on the glory of air combat? Can't find your Mac's joystick through the teetering stacks of "Soldier of Fortune" magazine? Tired of people calling you a war monger? Thrustmaster's Flight Sim Cockpit (modeled after an F-16C cockpit) can help with the first three problems; you'll have to take the fourth up with your recruiter. Made of medium-density fiberboard tough enough to withstand a direct hit from an AIM-120 (or an angry two-year-old), the Flight Sim Cockpit has room for a computer, monitor, and flight simulation controls (such as joysticks and foot petals) galore. The prices add an extra touch of realism. The basic cockpit is $695, but you can add so much more. There's a fiberglass external shell with "appropriate decals", such as Danger: Ejection Seat and Rescue ($975), seat pads ($199), a shoulder harness ($99), and a ladder ($149). Total price: $2,117. You still need to add your own joystick. Fortunately, Thrustmaster also sells flight controls, such as the FCS Mark 1 joystick ($149.95), the RCS rudder pedals ($149.95), and the WCS Mark 1 throttle ($99.95). Total price: $2,516.85. A bargain by Pentagon standards. To take to the skies, contact Thrustmaster at <http://www.thrustmaster.com>, or call 503-615-3200.

NO NEED TO ENLIST... YET



Starter Kit

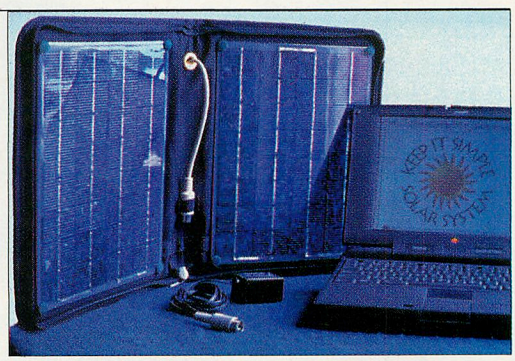
PhotoDisc

You've got an idea for a graphic, but you're no photographer. You don't even play one on TV. Cover up your feelings of inadequacy and find that perfect image with the PhotoDisc Starter Kit. This is your gateway to a cornucopia, nay, a veritable plethora of images. The Starter Kit includes the 236-page PhotoDisc Resource Book 2 and the 286-page PhotoDisc Resource Book 3, each with more than 4,000 thumbnails of PhotoDisc images. The kit also includes corresponding CD-ROMs with all of the same images in a low-resolution format (150K image size), a built-in search engine, and a bonus of 10 free, high-resolution (10MB) images on each CD. If you see an image that you want but don't have the high-resolution version, no problem. You can go to the PhotoDisc Web page, purchase the image, and download it right then. Besides, the books make great coffee-table publications if you want to class up your place a bit for only $39, which gives you a $39 credit toward your first purchase of one of PhotoDisc's CD-ROM collections. For more information, call PhotoDisc at 800-528-3472, or go to <http://www.photodisc.com>.

THE DISCS WORTH 8,000,000 WORDS

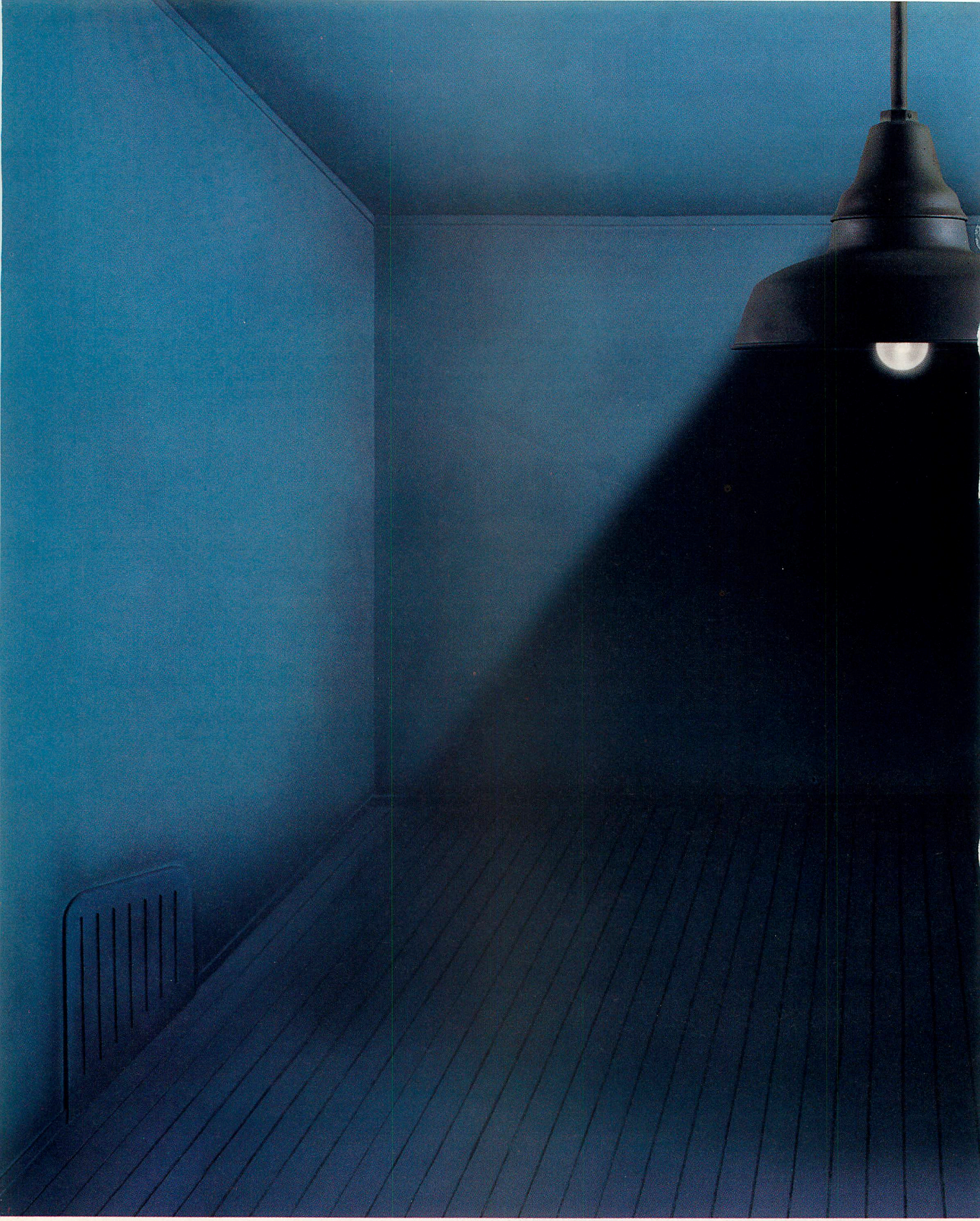
Solar Systems Mercury II

Keep It Simple



So here's Sir Edmund Hillary on the slopes of Mt. Everest, about to summit for the first time in history. But first things first. Hillary pulls out his PowerBook 5300 (which doubles as a space heater) to play a game of Tetris, brazenly ignoring the operating specifications that say a Mac shouldn't be operated above 10,000 feet. He pushes the power button, waits for the familiar chime, and... nothing. His final battery has run out. Discouraged, Hillary turns back, never to climb again. History is altered, eventually leading to New Zealand's conquest of the Western Hemisphere in an odd twist involving wool production and national pride. Had Hillary forked out an extra $395 and taken the Mercury II solar power system to the mountain, the rest of us would have been spared the pain of learning a new national anthem (except for those in New Zealand, of course). The Mercury II provides enough power (in decent lighting conditions) for any PowerBook, and charges batteries at half an AC outlet's capacity. The Mercury II has an expected life span of at least 20 years, and it can also power over 100 other portable computers (as well as acting as a station for charging cellular phones, camcorders, and radio equipment). Keep It Simple Systems can be contacted at 800-327-6882, or at <http://wildwestweb.com>.

ACCESSORIES FOR THE POWER-HUNGRY



SEGASOFT™ Developed by ROCKET SCIENCE™ ©1996 SegaSoft Inc. All rights reserved. Obsidian ©1996 Rocket Science Games, Inc. All rights reserved. SegaSoft and the SegaSoft logo are trademarks of SegaSoft Inc.



Rocket Science, the Rocket Science logo, and Obsidian are trademarks of Rocket Science Games, Inc. Windows is a trademark of Microsoft Corporation. Macintosh is a trademark of Apple Computers, Inc.

Mac OS

Designed for Microsoft Windows 95

The HARD STUFF

EVERYTHING YOU NEED TO ROCK YOUR WORLD, OR ANY WORLD FOR THAT MATTER!



photos by Aaron Lauer

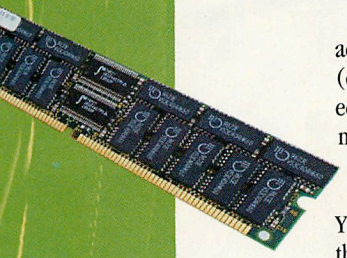
by Kathy Tafel

Everyone knows that killing an alien with your bare hands is virtually impossible. Even when you're armed with a Mac, taking down ET can be pretty tough. But when your Mac is primed for ultimate gaming destruction, not only will your gun fire more bullets faster, your victim's blood spurt darker and higher, and your world seem dangerously larger, but the overall experience can be literally… killer.



Gamers who want to get the most out of shoot-'em-ups such as Marathon, MechWarrior II, and Havoc can beef up their Mac arsenal enough to make the Windows geek down the street choke on his Perrier. Sure, Gates' goons get to sweat over hot PC-only titles, such as Duke Nukem and Quake, but Apple is fighting back by finally giving developers the free code libraries, aka Sprockets, they need to keep up in the cut-throat gaming arena.

As more and more fast-paced click-and-shoots, epic adventures, and simulators become available for avid (or is it rabid?) Mac gamers, you'll want to be super-equipped to experience the mayhem to the fullest. You need the ultimate gaming machine. Here's how to get it.



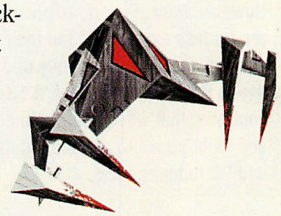
PUMP UP THE BASS

Yes, you can play solitaire on any Mac going back to the 128K. To play today's 3D, real-time games, though, you'll need a heftier machine. First of all, you absolutely must have a PowerPC-based Mac. A game environment that is built on the fly, such as Marathon, requires the number-crunching brawn of the PowerPC. And any game that promotes itself as "real-time," as opposed to turn-based (such as Warcraft), needs it, too, to be very responsive. In fact, the only things that tax your Mac more than these games are real-time video and audio-editing programs—the ones that professionals use.

This is not a load of bull tinky devised to get you to spend lots of money. You really do need this much horsepower to get the most out of the latest games. It used to be that only high-end workstations could display 3D graphics. To get the 3D, realistic look in a game, the scenes all had to be prerendered, stored on CD, and then displayed in a somewhat static fashion à la Myst. The way things are today, that genre of game has prerendered scenes, plus full-motion video up the wazoo, and comes on six CDs. While generally gorgeous with good story lines, these games aren't exactly immersive or responsive, because so much has to be loaded off the CD-ROM. (We won't even talk about the quality of acting in most full-motion video games.)

The other way to build a gaming world, the way now in fashion, is "on the fly." Rather than prebuilding a world and storing it on CD, the developer stores the description of a world inside the game application, and your Mac builds the world every time you play the game. This stresses your machine to the limits—it must render a world (which consists of making polygons and shading them), and at the same time remember where you are in the game (to send computer opponents to waste you), show the action on the monitor, and have great "splat" sound effects. Developers can do one of two things when creating these games: First, they can make these games faster on lower-end machines (for example, 68K Macs) by literally cutting corners. Games look less realistic because the computer can't calculate the shapes and textures of as many polygons as a PowerPC-based Mac can. Alternately, developers can make the games so that they require a PowerPC chip to even run.





Why is the PowerPC such a kick-ass game chip? For one thing, it was specifically designed to do floating-point math really fast, and floating-point math is the basis of making 3D shapes. Floating point refers to decimal numbers such as 396.21352. Integer math uses whole numbers such as 2+2=4. Before the PowerPC, it was a lot harder for developers to use floating-point math and still create programs that ran respectably. They just couldn't do 3D rendering, much less run a 3D game, on a 68K machine that didn't have a floating-point coprocessor. With the PowerPC they can.

Although you can upgrade an older Mac with a PowerPC card, we strongly recommend buying a new machine, as it offers advances in the audio and visual circuitry that you just don't get with the card alone. And while you're at it, be sure to get the Level 2 cache for the extra speed boost.

With that said, what would our dream gaming machine be? Well, we'd start with a Performa 6400/200: This gets us a superfast 200MHz 603e processor, a 256K Level 2 cache, and an expansive 2.4GB hard drive. To that, we'd add an AppleVision 1710AV display and an ATI XClaim VR card. Turn the page to see our ultimate gamer's Mac.

Happy, Happy Joy, Joy

A joystick not only is fun to drive but also frees you from having to memorize key commands.

For years Mac gamers have avoided using peripheral controllers. Sorry, folks, for a truly immersive experience, get a joystick.



ThrustMaster

503-615-3200; http://www.thrustmaster.com

Thrustmaster takes the cake for sheer luxurious feel in its line of sleek, black controllers. The *flight simulator* and racing car controllers make it feel real. And if you have an extra couple hundred dollars to spend, check out the flight sim cockpit in Cravings (page 30) this month. (Unfortunately, the switch kit is PC only.)



CH Products

619-598-2524; http://www.chproducts.com

Slightly more affordable, CH Products' FlightStick Pro is a perfectly acceptable controller, if not as flashy as the ThrustMaster. You'll need big hands, though, to get around the FlightStick.



Gravis

206-881-5705; http://www.gravis.com

Gravis' products are not the most luxurious. However, they all work as promised and are far less expensive than their upscale cousins. Gravis has recently updated its line to include the Firebird, a 13-button controller that works with both action games and flight sims. An optional adapter lets you add PC rudder pedals.



MacAlly

800-644-1132; http://www.macally.com

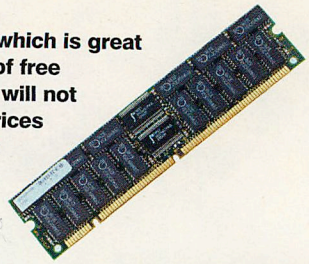
We really like the feel of the Batwing, compared to the GamePad. This controller looks a lot like the Pippin's but can attach to a real game machine. The joystick also adds a few handy touches, such as suction cups on the bottom to keep it from moving as you save the universe.



ChoiceStick

302-456-3026; http://www.kernel.com

If you just can't wait for a controller for another platform to come to the Macintosh (if ever), get the ChoiceStick adapter for either PC hardware or console controllers.



The Performa 6400 includes 16MB of RAM, which is great because many games require at least 8MB of free RAM. Even then, some leading-edge games will not run as smoothly as you'd like. While RAM prices are so cheap, buy as much as you can. With 32MB you'll rarely bump your head.

If you really want to go game crazy, get an extra 1GB hard drive or be prepared to allocate some of the 2.4GB drive that comes with the Performa 6400 to games. Either way, create a 650MB partition with a utility like FWB's Hard Drive Toolkit. Copy your current favorite CD-ROM-based game to that partition—the game will run faster. Remember to rename the partition the same as the CD.*

All new machines include an 8X CD-ROM drive. You really need only a 4X drive.

To play online multi-player games, you'll need network support, which means a 28.8Kbps modem and an Internet connection.





Make sure that your keyboard, like the one that comes with the Performa 6400, has a keypad and arrows in a T shape rather than in a straight line—this arrangement makes it easier to play games.

*NOTE: This is not a call for piracy. Don't copy a game to your hard drive and then give it to a friend. We want the nice game developers to make money so they make more games, right?

A Quick 3D Primer



ATI's Xclaim VR card adds 3D acceleration to any PCI Mac. What does this get you? Games will run faster, not just because the card computes the routines more quickly but also because the processor is freed up to calculate the rest of the game. The Xclaim VR also adds enough VRAM to give millions of colors on a 17-inch monitor, making up for the 6400's lack of VRAM. The video-out lets you use your TV as a monitor; the video-in lets you digitize video.



A 17-inch monitor is great for games that can use the extra space and for displaying other games really big.

You need at least a pair of speakers to hear games in stereo. To be truly creeped out, get surround sound and a subwoofer (built into the Performa 6400).

If you don't have the AppleVision 1710AV, get external speakers. Speakers should be shielded so they don't interfere with your monitor. You can also hook up modern Macs to your home stereo system using the same cable you'd use to plug in a portable CD player to the stereo. If you do this, you absolutely must keep the speakers away from your monitor, as most stereo speakers aren't shielded.

Associate Editor Kathy Tafel hasn't desired a new Mac so badly since she saw the Quadra 840AV.

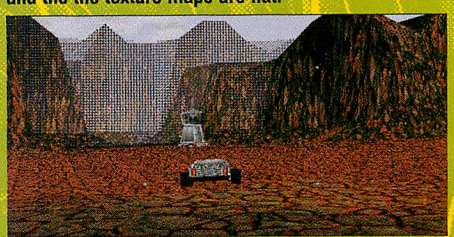
Ordinary 3D accelerators won't make your game look better. They will help you if you're using a 3D application, such as Fractal Raydream Studio, because they specialize in speeding rendering. Games, however, have specific needs that these cards don't address.

To see what 3D acceleration will do, look at Reality Bytes' HAVOC, the first Mac game to use RAVE.

WITH ACCELERATION the fog is smoother, texture maps are lusher, and gunfire is more detailed.



WITHOUT ACCELERATION the fog is rough and the the texture maps are flat.



Here are some of the game-specific effects that a card, such as ATI's Xclaim VR speeds or enables.

FOR A COMPLETE 3D PRIMER, visit the MacAddict Web site.

Alpha blending Each pixel in a computer image can have a red, green, blue, and alpha value, which together specify the transparency for the pixel. In a 3D world, objects are layered on top of each other—think of looking through a window to see the landscape outside. Alpha blending composites the alpha channels of each object and, depending on how transparent each alpha channel should be (from completely transparent to not at all), figures out that you should see the trees through the window but not through the wall surrounding it. An accelerator card that supports alpha blending makes those calculations faster and smoother.

Fog No, it's not adding spooky effects. Fog figures out when an object in a 3D world should be rendered. The closer you get, more of an object becomes apparent. With an accelerator, fog effects are smoother.

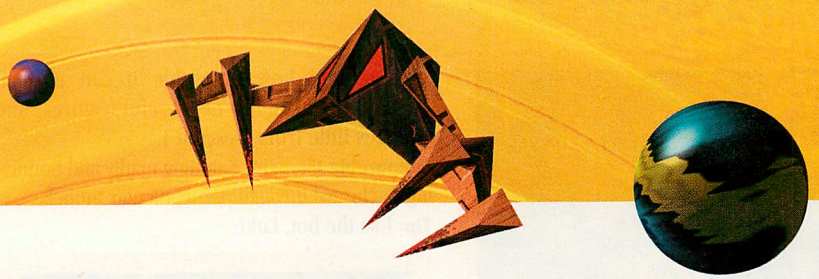
Texture Filtering Texture filtering removes aliasing artifacts such as sparkles and blockiness. The QuickDraw3D RAVE API gives game vendors three settings—Fast, Mid, and Best—which allow for a different kind of filter to be used depending on whether the texture is in the foreground or background. With the Mid setting, things up close look smooth but things in the distance are pixelated because quality is less important. Without a card, vendors would probably make the game use the more pixelated setting in all instances.

The SOFT STUFF

EVERYTHING YOU NEED TO ROCK YOUR WORLD, OR ANY WORLD FOR THAT MATTER!

by Kathy Tafel

Come on. It's the holiday season. Time to lighten up, take a load off your feet, sit around, and play a few games. And there has never been a better time to be a Mac gamer. Developers are once again taking the Mac seriously, releasing more and more games. Major players such as MacPlay, Activision, and GT Interactive are producing more high-quality Mac games than ever before.



So while there are more games out there this year than last, they aren't all must-have toys. To help you while away those long winter hours, we've sacrificed much of our time to testing, testing, and more testing of all the Mac games still in existence. Once we finished wearing our fingers to the bone, we divided the Mac games you just must have into four categories: Action, Adventure, Puzzle, and Simulation.

Some of the games on this list are a trip down memory lane, but they still provide great gameplay. Others are the latest and greatest titles at the top of their form. For each title, we'll tell you what distinguishes it as a Mac game, moments we'll always remember, and whether you'll have to use more brain or more brawn to come out a winner.

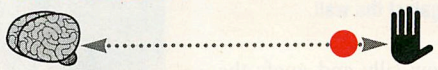
Action Games

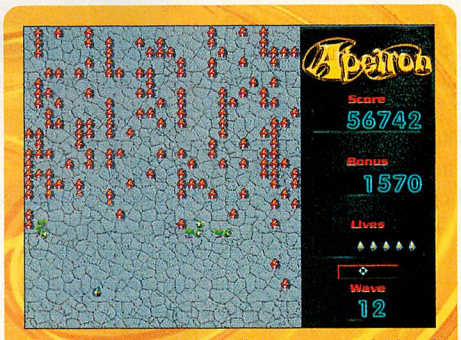
In an action game, you must overcome obstacles by "physical" means, rather than by using your brain. That is, you blast your opponent to smithereens or run away as fast as you can. These used to be mainly arcade-like games, but recent gains in CPU horsepower have enabled the development of first-person perspective 3D games. (You still have to blast your opponent to bits, but in a first-person perspective game, you are actually in the world, seeing it exactly as the character you're playing does.)

You'll want a joystick when playing these games. If you don't have one, follow these guidelines when configuring your keyboard. First, open the Keyboard control panel and set the Key Repeat Rate to fast and the Delay Until Repeat to slow. When configuring the keyboard for a game, consider which key you will be pressing the most, and which ones you'll want to hold down at the same time. If you are pressing a key a lot, consider using the caps lock key—it stays down until you press it again. The Mac keyboard only "listens" to one key at a time with the exception of the following keys: caps lock, shift, control, option, and command. So if you want to shoot at the same time you're ducking, better use those keys.

Apeiron

Developer: Ambrosia Software
Price: $15 (shareware)
Contact: 716-325-1910





Shoot that 'shroom before it bops you on the head.

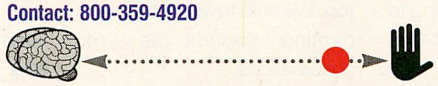
So there are these mushrooms, and you shoot them, and there's a centipede crawling up and down the screen and when you shoot one or more of his body segments, they turn into more mushrooms, and all these mushrooms get in the way of shooting the centipede. And then there's a funky lobster and you can shoot it too. The goal is to get rid of all of the centipede's body segments. When a mushroom starts flashing and you hit it, you score mucho bonus points. Reward coins rain down from heaven (Okay, the top of the screen) giving goodies such as shields and better guns. Oh, kinda sounds like Centipede. Well that's just what it is, but boy, is it a cool implementation. Minor annoyance—the installer doesn't let you choose where to put the game; it automatically installs the game at the root level of your hard drive.

Memorable Moment: The hookah-smoking caterpillar Game Over screen.

Tip: Keep the bottom of the screen clear of mushrooms, but not too clear—otherwise the bouncing Groucho tick will come and fill it up.

Crystal Quest/ Crystal Crazy

Publisher: Casady & Greene
Price: $23.95 (street)
Contact: 800-359-4920



Crystal Quest was one of the first Mac arcade games (1987!). While you don't actually go on a quest since all the crystals are in plain sight, the crystals do get harder and harder to



JUST ABOUT EVERY single game on this list is on The Disc. You weren't going anywhere this month anyway, were you?



IF YOU GET STUCK, check out our Web site. We'll link to sites where you can find cheats for many of the games.



Beside collecting crystals, Crystal Crazy lets you smash objects up against the wall.

collect. It's amazing how silly and goofy the authors were able to make the graphics, even in black-and-white. Only a Mac game would put cows in space. The pieces in the sequel, Crystal Crazy, are even funnier.

Memorable Moment: The silly sounds.

Tip: Fiddle with your mouse Control Panel to get the right degree of control or you'll end up crashing into the gate far too often.

Descent I and II

Publisher: MacPlay
Price: $29.95 (srp); $59.95 (srp)
Contact: 800-4MACPLAY

Though it has the thinnest veneer of a plot (aliens have taken over mines on planetoids), Descent I and II add the third dimension to the find-the-keys, beat-the-boss genre. And it's amazing how quickly and totally disorientation sets in, and how enjoyable it can all be. Descent II adds a few new useful features, but changes little from Descent I.

Memorable Moment: Spinning madly and bouncing backward through perpendicular tunnels.

Tip: Use the bot, Luke.



This bot is out for blood—and you're exactly the type it's looking for.

Doom II

Publisher: GT Interactive
Price: $47.95 (street)
Contact: 800-305-3390;
http://www.gtinteractive.com

One of the first first-person shoot-'em-ups to appear on the PC, Doom had PC gamers raving. Now Mac players get to share in the insanity with Doom II which has the best graphics of any of the DOOM ports. You get to run around gathering ammo and armor and blast away bizarre monsters. Unlike other first-person games, there is no concept of up and down, so it's much easier to shoot the baddies who are standing on platforms. One of the very worst moments is realizing that, yes, those are invisible creatures shooting at you.

Memorable Moment: The Simpsons WAD.

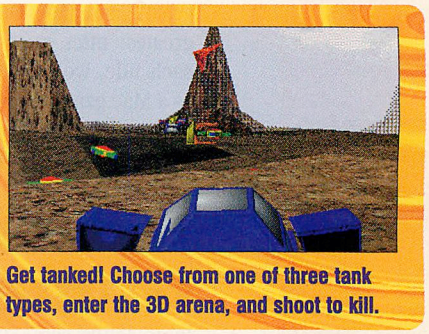
Tip: Keep your hand on the trigger, Tex.



Get that scary monster! Kill! Kill! Shoot! Kill!

Havoc

Developer: Reality Bytes
Price: $37.95 (street)
Contact: 617-621-2500



Get tanked! Choose from one of three tank types, enter the 3D arena, and shoot to kill.

Had it not arrived just a tad too early to be in our premiere issue (Sept/96), Havoc would have received a "Freakin' Awesome" rating. In this tank game, you try to obtain a key on each level without getting blown to bits by the other tanks. This game was the first to take advantage of the QuickDraw 3D Rave API, which means that if you have an accelerator card, you get higher levels of detail in the 3D rendering. But a game isn't great just because it uses the latest technology. Havoc is pure fun. You feel as though you're really driving around. It's a blast to be at the top of a hill just before going down the other side. And there's stuff to shoot, too. Havoc is the first game tat makes you feel as though your Mac is a PlayStation.

Memorable Moment: Gives you an extra disc so you can play a network game against a friend.

Tip: Don't play *too* long or you may actually become dizzy or get motion sickness.

Maelstrom

Developer: Ambrosia Software
Price: $15 (shareware)
Contact: 716-325-1910

Games That Made a Difference

Marathon

Developer: Bungie
Price: $37.95 (street)
Contact: 800-295-0060

AGAINST COMPUTER ON NETWORK



"They're everywhere!" Network games are what makes Marathon a blast to play (literally).

Marathon is probably the seminal Mac 3D first-person perspective shoot-'em-up. If you have a Power Mac, you have no business not owning Marathon or one of its sequels. And if you're on a network, you have even less of an excuse. While there is a plot (kill the aliens and rescue the poor suckers, I mean, hostages), Marathon is best enjoyed while trying to blast apart your nearest and dearest friend. There's also just no substitute for running up behind your boss and SPANKing her. There are cooperative network games, too. We also love the ambient panting sounds as you chase aliens.

Memorable Moment: The screaming death dealt by the napalm unit.

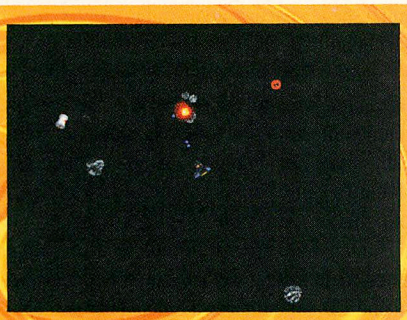
Tip: Use the caps lock key for run, so you don't have to keep holding down a key.

Why It Made a Difference: Marathon was the very first first-person perspective Mac loyalists could play over a network.

Maelstrom marked Ambrosia Software's entrance into shareware games. You have a little ship, and you must clear all these big rocks out of your sector of space. Now, what were those rocks called? Oh, yeah... ASTEROIDS! Amusing sounds and sprites add to the game. The lone exception is the female squeals of delight. Why does it take so long for boys to grow up? Do they think women will never play their game?

Memorable Moment: Realizing that some things just cannot be killed.

Tip: Blow everything up except the goodies.



May I shoot the rocks now, please?

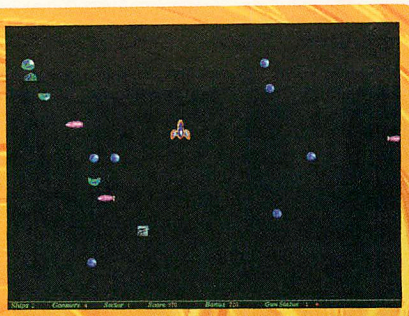
PegLeg

Publisher: Changeling Software
Price: $34.95 (street)
Contact: 800-769-2768

If you ever happen to visit us here at MacAddict, take a look at our receptionist's Mac. Chances are, you'll find it running PegLeg, and not just because it's an LC III. Pegleg is a fun little arcade game that is reminiscent of Space Invaders, but has many more baddies. Funny sounds and cute sprites add up to an engaging experience.

Memorable Moment: Losing yourself in sheer mindlessness.

Tip: Don't forget to catch your rewards!



Another arcade shooter, PegLeg's charming graphics and sounds will soon send you into blissful mindlessness.

MechWarrior II

Developer: Activision
Price: $45.95 (street)
Contact: 800-477-3650



As a member of the Jade Falcon clan, you must smash this Wolf to smithereens. Get him before he gets you.

Once you learn the controls—and we still need our reference card—MechWarrior II is a blast. You outfit your Mech with various weapons depending on the mission, and then smash everything to pieces. It's sooo satisfying to blow off your enemy's legs. Can we please have the 3D textures in the next version?

Memorable Moment: Thump, thump, thump.

Tip: Learn to use the mouse; it will save you. Also, customize your Mechs because certain weapons work better than others: the long range pulse laser is very effective.

Bonkheads

Developer: 1 A.M. Productions
Price: $24.95 (srp)
Contact: 888-588-6165

Welcome to the world of Crag and Thog Bonkheads, two not-so-smart trolls. In this one- or two-player game, you guide Crag and Thog through various levels such as Mudville and Trollville, forcing them to bonk their heads on the platforms above them to stun cute, but dangerous, creatures. Once you've stunned the creatures, you get to kick them off the platform. Not too difficult, but mindlessly entertaining.

Memorable Moment: The "ooch" sound Crag and Thog make when they run into a creature.

Tip: Running off one edge of the screen pops you back to the other edge—a useful tactic for avoiding harmful creatures.



Bonk your head on the pipes to knock the beasties above into a dreamless sleep.

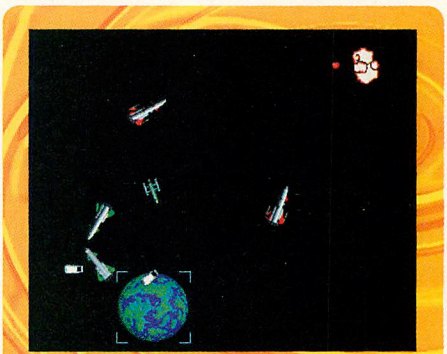
Adventure Games

In adventure games you follow a story from beginning to end. The first adventure games were text only. Animation was soon added, and with the advent of CD-ROM, full-motion video is now becoming a standard. Animated adventures, such as Dark Castle and Escape Velocity, include more action since it's easier to let the player control the game than it is in games that use video only. In a video-based game, you sit back and watch movies until it's time to make a decision or ask a character a question. But in all adventure games, you generally have an inventory of handy items, and a means of getting from point A to point B. The rule of thumb in an adventure game is "explore everything." If you get stuck, try to use everything in your inventory on everything else.

Escape Velocity

Publisher: Ambrosia Software
Price: $20 (shareware)
Contact: 716-325-1910

It's hard to decide how to categorize Escape Velocity. Probably the most popular shareware game to be released this year (so far), it's both an action and a strategy adventure. You are a starship pilot, starting out in a little itty-bitty shuttle. As you earn money ferrying cargo and passengers between systems, you can buy a bigger ship and outfit it with weapons. In addition to selling goods on a planet, you can also pick up missions in the Spaceport Bar, such as helping the Confederacy or the Rebels. To run with the big boys, though, you'd better have a tricked-out ship. If you run

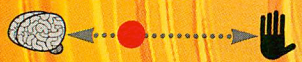


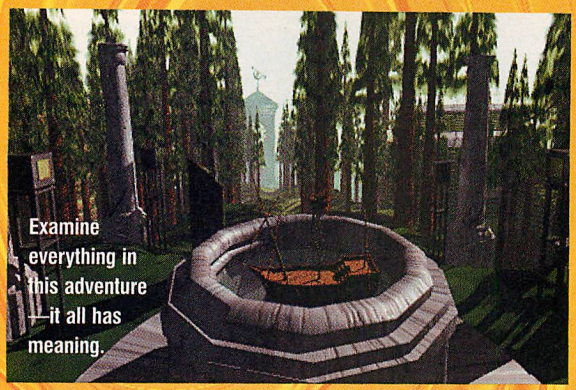
Better not mess with those confederate ships till you've got a Kestrel-class ship.

Games That Made a Difference

Myst

Publisher: Broderbund
***Price:* $54.95 (srp)**
Contact: 800-521-6263





Examine everything in this adventure—it all has meaning.

Yeah, so just about everyone has played the "best-selling PC game ever." Only we Mac zealots remember that it was Mac first, and written in HyperCard, no less. The big hooplah over Myst is that as one of the first CD-ROM games, it was able to show off audio and video capabilities as never before, providing a hauntingly beautiful 3D environment. Myst also has a compelling plot and intriguing, although not terribly difficult, puzzles. Unfortunately, many Myst clones have neither compelling plots nor intriguing puzzles, and their authors should probably play a few text adventures before trying again. The sequel, Myst II, is almost as heavily anticipated as Copland (and will probably show up in the same time frame).

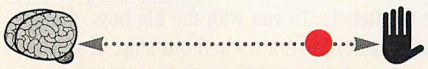
Memorable Moment: Looking for a stocking stuffer? Try Pyst, a Myst parody due this fall from Parroty Interactive (800-910-2696). Pyst, by the way, is how the island of Myst feels after 3.5 million visitors have trampled over it.

Tip: Click on everything.

Why It Made a Difference: Myst, with its compelling graphics, has spawned a whole series of copycat games. And, while true hardcore gamers usually don't enjoy Myst, the game persuaded many people to try their hand at a game for the first time.

Dark Castle

Publisher: Delta Tao
Price: $29.95 (street)
Contact: 800-827-9316





Which door *doesn't* lead to the dungeon?

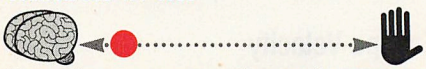
In this side-scroller, you must use the mouse to fling rocks at rats and bats as you collect keys that get you into other parts of the castle. You use special weapons to defeat bigger and badder enemies. I've never been coordinated enough to defeat the final boss, but I fondly recall the whoops of joy of fellow dormmates in college when they did. Dark Castle and the Infocom games (see below) are why I was on academic probation after my first semester at Cal :-).

Memorable Moment: Watching skeletons shake their heads as you take the wrong key, causing a 1,000-pound weight to fall on your head.

Tip: Keep your eye on the bats.

Infocom Text Adventures

Publisher: Activision
Price: $13.95 (srp)
Contact: 800-477-3650



Text adventures were the predecessors of today's graphical adventures. In these, you have a window and a cursor. You explore a world based on the description that the game gives you. A typical interaction goes something like this:

Seedy Bar
You are in a seedy bar sitting on a stool. To the north, the bartender is drying glasses. To the east you see a hallway. You feel an urge.

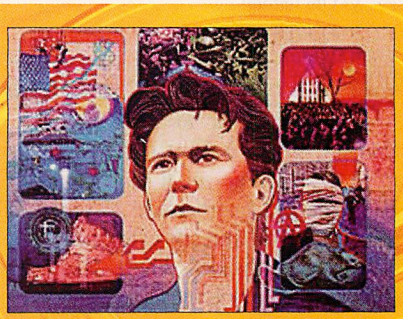
(Type "e" for east and hit the return key.)

Hallway
Farther east is a door marked "gulls." To the north is a door marked "buoys." You feel an urge.

In a text adventure, you have to rely heavily on both your imagination and the author's witty writing. Infocom was the prime purveyor of text adventures in the '80s, although there are shareware text adventures available, and even the tools to make your own. The best of delving into an Infocom game was the packaging inside—from the 3D glasses for the Leather Goddesses of Phobos comic book, to the origami instructions in Trinity—each game was a joy to open. What a far cry from today's publishers, who either have one measly CD-ROM in a huge empty box (yeah, yeah, shelf space, yada, yada), or a ton of marketing material that has nothing to do with the game. This year's lone exception was the packaging for The Secrets of the Luxor which includes an ad for a tour package that doesn't really exist. In addition to great packaging, Infocom's games made you think and laugh with both shallow and serious subject matter. You're in luck, because Activision (who bought Infocom) is selling EVERY single Infocom game on one CD for fourteen bucks. This is the best deal you will ever find. (The original packaging comes in PDF format though.)

Memorable Moment: The road runner.

Tip: Type "verbose" if you get stuck.

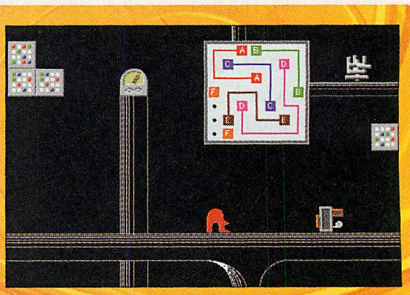


In Infocom's "A Mind Forever Voyaging," you travel though time via computer-sim to see (and prevent) the effects of government policy.

System's Twilight

Publisher: PlayMaker
Price: $15 (shareware)
Contact: playmaker@aol.com





As 3 In Three is no longer being published, play System's Twilight to get "inside your Mac."

System's Twilight is a shareware game that feels very similar to 3 in Three. The story takes place inside your Mac, the puzzles are hard, and the sounds and graphics are winning. The storyline is also very witty—for example, we loved climbing the binary trees. Also, if you think that Three in 3 is tough, well, heck, that's nothing compared to this game. The puzzles have kept many of us stumped for months. This shareware version lets you into about one quarter of the game.

Memorable Moment: It takes a while to realize that you've won.

Tip: Pay close attention to what the characters tell you.

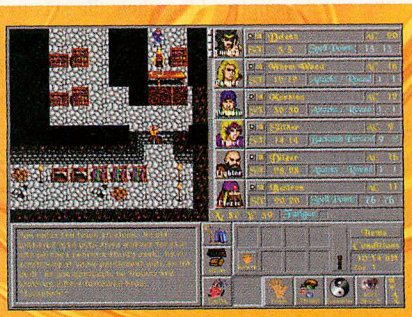
Realmz

Publisher: Fantasoft
Price: $15 (shareware)
Contact: 608-249-5418

Realmz is a wonderful shareware role playing game. You start out by creating characters—rangers, enchanters, and fighters—in several different races: humans, dwarves, and elves. You must assemble a party of six for your adventures. Once that's done, you venture into the town of Bywater and begin exploring. After you register, you get more scenarios, and there are always more being made.

Memorable Moment: When you realize it's better than Dungeons & Dragons.

Tip: Make a balanced party.



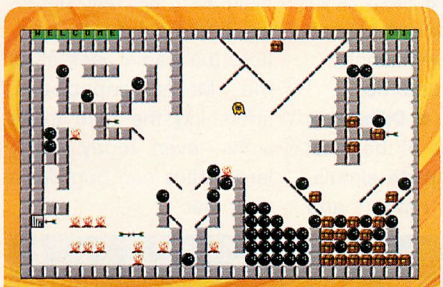
Know your party's skills before adventuring.

Puzzle Games

Puzzle games require you to put on your thinking cap. You must figure out what effect your current actions will have on turns in the future and how that will affect your ability to get to a precise goal. About half of the games here have the added pressure of solve it "NOW!" Also, for the pacifists among you, puzzle games usually don't involve any killing, bloodshed, or other creepy stuff (or at least nothing worse than what you'd find in a Road Runner cartoon). You can generally find hints in online newsgroups if you're stuck on a level.

Blobbo

Developer: Glenn Andreas
Price: $20 (shareware)
Contact: gandreas@aol.com



Now, how do I get to those chests without the bowling balls crushing me to bits?

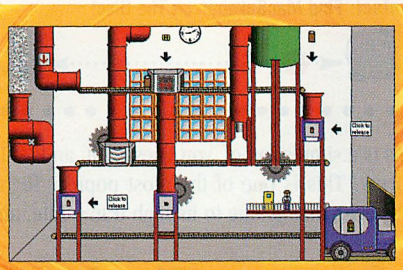
This is a cute (whenever I say cute I mean it has darling sprites and, well, cute sounds) little game in which you have to eat all the chests in order to open the exit for a level. In your way are bowling balls which will fall on your head, arrows which pierce you, fires which scorch you, and vines which obstruct you. You have only the occasional marshmallow to block the baddies.

Memorable Moment: Mmm, doughnuts!

Tip: Be absolutely sure that an action will not prevent you from reaching a chest later.

Factory

Developer: 7 'O'Clock Software
Price: $15 (shareware)
Contact: pcal@agora.rdrop.com



Better not put any cartons in the label bin or they'll be taken out as trash.

Imagine you're on an assembly line. Every day you tighten the same bolt on the same car for eight hours. Not in this factory. Each day of work here brings a new consumer item for you to assemble. You must put together the goods in the right order in order to get your paycheck. If you create too much garbage, you get fired.

Memorable Moment: The garbage you get when you mix ingredients in the wrong order.

Tip: Practice makes perfect... anyone have a method for the final level?

Gunshy

Developer: E.C. Horvath
Price: Freeware
Contact: Find Gunshy on The Disc!



The "traditional" icons in the version on our Disc are by Eric Baldwin.

Okay, so the commercial version (Shanghai) of this game is available from Activision, and

Games That Made a Difference

Tetris

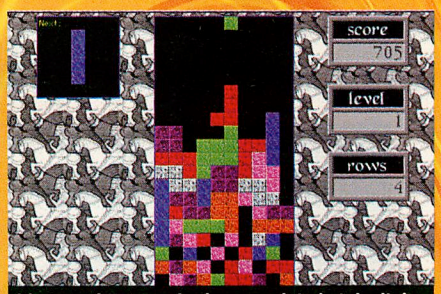
Developer: Opinicus Microtech
Price: $10 (shareware)
Contact: granola@aol.com

Tetris has a deceptively simple premise... drop pieces that are created out of four blocks to form lines of ten. But the pieces keep falling and falling, and the Russian music gets faster and faster and you hear yourself saying, "just one more time."

Memorable Moment: Dreaming of Tetris as you fall asleep at night... "If I put that one there, and this one there... "

Tip: Concentrate on clearing blocks before going after bonus points.

Why It Made a Difference: Tetris has the widest appeal of almost any game ever made. Hard-core gamers and novices all love the game thanks to its frustratingly hard simplicity.



It's tempting to go for bonus points-but don't do it when you have lines to clear.

the actress who plays Keiko on "Deep Space Nine" is on the CD-ROM offering advice, but this freeware version has been floating around online for years with people adding their tile sets to it. Basically, there's a bunch of tiles, which come in sets of four, arranged in a pile. You can only remove matching tiles that are on the top layer and have a right or left edge exposed.

Memorable Moment: This popular game has been passed around so much, that sometimes you'll find a corrupted version. Don't you love it when the version you're using crashes just as you solve a level?

Tip: Try to uncover the layers before working your way to the middle.

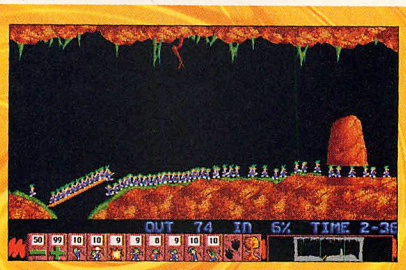
Lemmings

Publisher: Psygnosis
Price: $39.99 (srp)
Contact: 800-438-7794

Quick! What has green hair, a chubby tummy, big nose, and ABSOLUTELY no brain? Why, a Lemming of course. Which is why the lemmings need you. They've been placed in truly horrendous scenarios in which they will ALL DIE if you don't save them. And save them, you will, by giving them special skills such as climbing, floating, and digging. Do it right and you'll advance to the next level of mayhem. It's too bad Pysgnosis has left the poor Lemmings in Lemmings II: The Tribes and 3D Lemmings languishing on other platforms. We just know the poor fellows won't be saved until they're ported to the Mac.

Memorable Moment: This Internet signature: "Are we not Lemmings? If you click us, do we not... OH, NO!" (Thanks, Matt!)

Tip: Wait an extra second after your builders shrug their shoulders before you tell them to build more stairs. Do this, and you can make the stairs span an extra horizontal unit.



Yes, the poor darlings will follow the leader, even if he falls off a cliff, sniff.

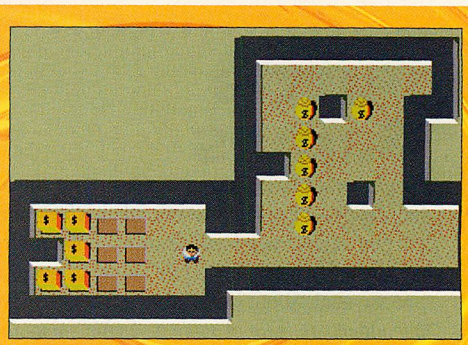
MacSokoban

Developer: Ingemar Radnemalm
Price: Freeware
Contact: Find MacSokoban on The Disc!

Sokoban (warehouse keeper) is a Japanese game in which you try to push chests into allocated spaces. Only trouble is, there's a maze in the way. And if you get too cocky and start moving too quickly, you might push something where it shouldn't go. Special features include a pathfinder for moving back and forth. The puzzles get more and more frustrating as you advance (of course). When you solve all levels in the game, you receive a diploma conveniently pasted into your clipboard.

Memorable Moment: The sound of chests being dragged across the screen.

Tip: Don't push two chests next to each other against a wall.



It's a piece of cake from here—much easier than moving refrigerators.

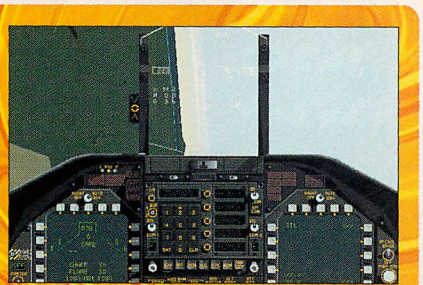
Simulation Games

Simulation games either simulate something in real life or fantasy. You generally need to manage resources of some kind, such as armies, metal, or money, in order to win. Cheats in this genre can involve editing the saved game file or game file itself using ResEdit and finding publisher-enabled cheats.

F/A-18 Hornet

Developer: Graphic Simulations
Price: $46.95 (street)
Contact: 214-38-7575

This is a simulation of, you guessed it, an F/A-18 Hornet. This is one of the most popular flight-sims ever, mainly due to its high frame rate, and relatively simple controls, which actually let you shoot down the other planes. Graphics are clean unlike Eidos' Flying Nightmares, which plays like



You can pull four to five Gs in a 90-degree bank, no problem. (Barf bags not included.)

Games That Made a Difference

SimCity 2000

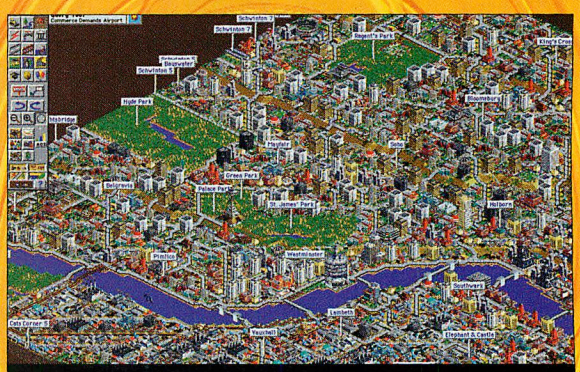
Developer: Maxis
Price: $38.95 (street)
Contact: 800-336-2947

As you'd expect, SimCity simulates a city. You play the mayor and control zoning and public works such as roads, utilities, and schools. Then you just sit back and watch your city grow. SimCity 2000 has wonderfully polished graphics and sounds and like a true Mac program, lets you use floating palettes to control everything. It's too bad Maxis has taken to making its current titles merely ports of the PC version, as in SimIsle, rather than making them true Mac titles that people would actually buy.

Memorable Moment: Launch arcologies never launch.

Tip: porntipsguzzardo.

Why It Made a Difference: SimCity is one of the most detailed, complete simulations ever made and includes great Mac graphics and sounds. In addition, the game uses all of the Mac's capabilities, stretching the Mac to its limits—even today, really large cities can bog down your Mac.



You can have London bustling in minutes with SimCity.

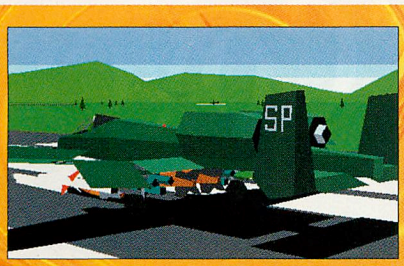
a PC game. If you play F/A-18 Hornet long enough, you get to drop a nuclear bomb. Of course, the shockwave tears your plane apart once you've dropped the bomb, so it's not generally a good tactic if you want to save your skin. Look for version 3.0 to be out soon.

Memorable Moment: Picking off the helicopters.

Tips: Fly with a good joystick.

A-10 Attack

Developer: Parsoft
Price: $45.95 (street)
Contact: 214-479-1340



Your Warthog is lined up on the runway, ready to wreak havoc with its beefy armament.

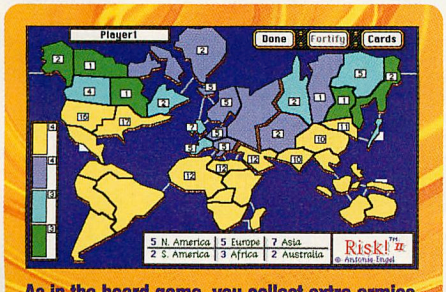
This flight simulator has a zippy frame rate, even on a 68K Mac, making it smooth enough to get you completely immersed in the game. The armament is roughly equivalent to a B-52, which means you can carry a ton of ordinance. The plane as modeled is a really tough sucker—you can take hits on your wing and have jammed landing gear, and still be able to complete a mission and land your craft on its belly. The missile view kicks butt.

Memorable Moment: You can play up to three planes in the air at a time.

Tip: Rely on your cannon, it will chew up just about everything. Carry a couple of HARMs.

Risk

Developer: Antonie J. Engel
Price: Freeware
Contact: Find Risk on The Disc!



As in the board game, you collect extra armies based on how much territory you control.

This is a no-frills version of the popular board game. You can play against friends (on one computer) or against the computer, and you can set the computer, artificial intelligence to be aggressive, defensive, or vindictive. Gameplay is simply an automated version of the original. And, in a touch of cool, Risk used a drag and drop interface long before System 7.

Memorable Moment: "A single country can contain, at most, 99 armies."

Tip: Consolidate and fortify.

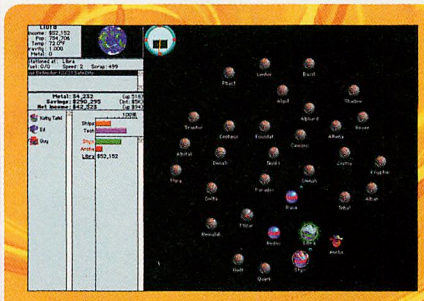
Spaceward Ho!

Publisher: New World Computing
Price: $28.95 (street)
Contact: 800-827-9316

Your job in Spaceward Ho! is to colonize the galaxy and eradicate the competition. You have a budget that grows with your population, and you build ships with metal that you mine. Your budget is divided between saving money to buy ships, and new technology research. Game play are iconized worlds in cowboy gear, so the galaxy quickly turns into a bunch of planets wearing hats (go figure). While the game has a lighthearted attitude, the computer AI can be very difficult to beat. And there's network play, too.

Memorable Moment: Noticing that female player's planets have longer hair.

Tip: Protect border planets with satellites.



Betcha didn't know that planets wore ten-gallon hats, now did you, partner?

TacOps

Publisher: Arsenal Software
Price: $44.95 (srp)
Contact: 800-247-1877

TacOps is a turn-based, tactical, military simulator using modern-day weaponry. Essentially, you blow things up within the context of reaching an objective. TacOps is a simple game—there are no flashy graphics or sounds—but it teaches you military tactics, while you play the game. You will learn how to play pieces such as tanks to their best advantage, from setting the stage for the battle, to using terrain, and not placing them in front of anti-tank squads. The game was written by a retired Marine major, and the realism shows. You can configure TacOps to play on the same Mac, over a network, or via e-mail.

Memorable Moment: Receiving e-mail with subjects like, "Die, scumbag," simply because you wiped out half of your opponent's infantry.

Tip: Go for side and rear shots against armor.



Setting up a TacOps game can easily eat up more than an hour (if you want to win, that is).

Warcraft II

Publisher: Blizzard Entertainment
Price: $48.95 (street)
Contact: 800-477-3650

Warcraft will be considered one of the best games in history. It has backstory like an adventure game, with a fantasy theme of Orcs invading human territory and scenarios based upon this backstory. It has resource management like a simulation: you have to build a village and keep it stocked with lumber, gold, and oil for the war effort. It has close combat like an action game: you have to beat your opponent in hand-to-hand fighting. And as a strategy game, you have to figure out the best way to manage your resources in order to build a big enough army to best your opponents and thus, win a scenario. In addition to great gameplay, Warcraft has hysterical sound effects "Even the Elder races get tired of waiting," high-quality graphics, and a stirring soundtrack. The Mac version has 3D sound and you can enter cheat codes using speech recognition technology.

Memorable Moment: The gnomish inventor exclaiming, "I've got a flying machine!"

Tip: Patience, grasshopper.



Those dragons can cause massive damage! Protect your village with lots of Rangers.

Associate Editor Kathy Tafel can't get past the dragons on level 13 of Warcraft II. Someone help her.

1400

Under an 'Epic' Cover

by Owen W. Linzmayer

With its recent introduction of the PowerBook 1400, Apple is no longer the notebook computer whipping boy. When the PowerBook line debuted in 1991, it redefined the notebook category with its innovative and widely imitated design featuring a built-in trackball and pushed-back keyboard. But lately Apple has had a hard time living up to its promising start. The PowerBook 5300 has been plagued by problems, ranging from exploding batteries to cracked cases, and it has been virtually unavailable since Apple implemented a recall under the guise of a "repair extension program" in June. To make matters worse, recent PowerBooks have been derided as inferior to their Wintel counterparts: They're not as fast nor lightweight; they lack long-lasting batteries; and they lack built-in CD-ROM drives. The new PowerBook 1400 closes the gap. Although it doesn't exactly live up to its code name, Epic, it does offer all of the features found on Wintel multimedia notebooks, plus some firsts for Apple: a removable modular CD-ROM drive, easy expandability, flip-up keyboard, piggyback memory, huge screen, and something completely new called BookCovers.

photos by Aaron Lauer



Compact Disc Delight

What sets the PowerBook 1400 apart from its predecessors is the ability to remove the standard 1.4MB floppy module on the front of the unit and replace it with a 6X CD-ROM drive module. The CD-ROM drive, which is imperceptibly heavier than the floppy module (total system weight is seven pounds), has a small button to open the tray onto which you directly place discs—there's no need for a caddy. Unlike desktop models, which close themselves at the press of a button or the slightest pressure on the tray, you must manually close the PowerBook 1400's CD drive. Fortunately, discs are ejected automatically when dragged to the Trash, just like normal. If there's a problem, you can always use the old favorite fix: a straightened paper clip in the manual-eject hole.

The three PowerBook 1400 models range in price from $2,499 to $3,499. All three models have at their core a 117MHz PowerPC 603e; the only differences are in the amount of RAM, screen type, hard drive size, and whether a CD-ROM drive is optional or standard. The basic PowerBook 1400cs/117 comes with 12MB of memory, a color dual-scan display, a 750MB hard drive, and a modular 1.4MB floppy drive (in case you haven't figured it out, the "cs" suffix stands for *c*olor dual-*s*can). For $400 more, an enhanced 1400cs/117 offers an extra 4MB of memory and a 6X CD-ROM drive in addition to the floppy drive. The high-end PowerBook 1400c/117 comes with 16MB of memory, a color active-matrix display, a 1GB hard drive, plus floppy and CD-ROM drives.

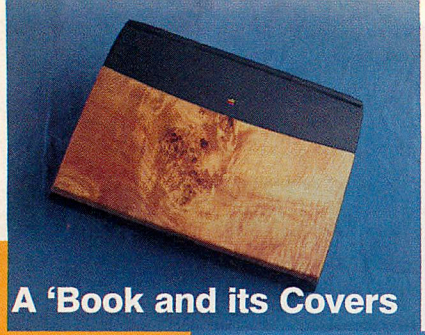
The PowerBook 1400 was designed to appeal to customers who want multimedia essentials without costly bells and whistles. It's not intended for high-end users, but until Apple ships its PCI-based PowerBook (code-named Hooper) in the first quarter of 1997, the three PowerBook 1400 models will comprise Apple's entire notebook line. (although the Duo 2300 subnotebook is likely to remain available into the foreseeable future).

The 6X CD-ROM drive modules are not quite as fast as the top-of-the-line 8X drives now available in desktop Macs and some Wintel portables, but they're plenty fast for all current multimedia uses and will probably continue to be fast enough for years to come. After all, most CDs run fine on double-speed drives, and only a handful (such as Activision's SpyCraft) require a quad-speed drive. In any event, there's always the possibility that 8X modules may be offered later.

In addition to the floppy and CD-ROM modules, Apple expects third-party vendors to offer magneto-optical, hard disk, and Zip drives that fit into the PowerBook 1400's expansion bay (devices designed for the PowerBook 5300's expansion bay will not work on the 1400). All devices are "sleep swappable," meaning there's no need to shut down to change modules.

Getting to the Guts

Swapping drives is just one aspect of the PowerBook 1400's expandability. Instead of requiring a skilled technician and a special



A 'Book and its Covers



The most innovative industrial design feature of the PowerBook 1400 is the use of BookCover inserts that slide under a clear plastic panel. Although Apple thoughtfully provides a half dozen samples, they only scratch the surface of what can be done with a little imagination and the included ClarisWorks template. Consider using the following as inserts:

- **university/corporate logos**
- **daily schedules**
- **audio CD liner notes**
- **family photos**
- **maps**
- **quick-start guides**
- **program shortcuts**
- **comic strips**
- **magazine covers**

Any more great insert ideas? Share them with MacAddict (MacAddict@AOL.com) and we'll publish the most interesting ideas in a future issue.

Torx wrench, you can expose the PowerBook 1400's guts by popping off the elongated plastic speaker grill that resides between the keyboard and the screen. The keyboard flips up to reveal a 2.5-inch Integrated Drive Electronics (IDE) hard drive beneath. This can be removed with a Phillips screwdriver, as can the aluminum heat sink if you want to get at the goodies below.

The heat sink cools the PowerPC 603e as it cranks along at 117MHz. This is slightly faster than the PowerBook 5300, but certain benchmarks are slower than one might expect for this processor. Apple says that this is because the processor in the PowerBook 1400 is not optimized for the PowerBook 5300's architecture, on which the 1400 is based.

The CPU is on a removable daughtercard, and third-party vendors have already promised upgrades to faster chips. For example, Newer Technology plans to introduce a combination 603ev CPU and Level 2 cache replacement that may run as fast as 180MHz, and there are rumors that Apple may have a similar "speed bump" in the works. Incidentally, there's no slot for a Level 2 cache, and due to space constraints it's unlikely anyone will offer one except in conjunction with a CPU upgrade.

All PowerBook 1400 models come with 8MB of memory soldered onto the motherboard and two memory sockets, one of which is filled by Apple with a 4MB or 8MB module, depending on the model. With the remaining empty socket, you can increase the memory to a maximum of 64MB, although you needn't do it all at once. The PowerBook 1400 uses piggyback memory modules, so you can plug one module into the empty slot and another module on top of this. You can't piggyback the module that Apple ships with the PowerBook 1400, because that would block the space used by the internal expansion slot. We like the ability to add memory incrementally without hiring a technician, but including only 12MB of memory on the basic model is stingy given the voracious demands of recent system releases and productivity programs. Apple should spend the extra 30 bucks or so to up the minimum configuration of all of its offerings to a more realistic 16MB of memory.

Next to the two memory slots in the PowerBook 1400 is an internal expansion slot. Although Apple didn't give us too many details about its specifications, several peripheral manufacturers are working on cards that provide Ethernet networking and video-out capabilities through a knockout panel on the back of the machine. Apple intends to sell an 8-bit video-out card for this slot, leaving 16-bit video-out to third parties. This is not a communications slot, so it can't be used for an internal modem.

The two PC card slots on the left side of the PowerBook 1400 can accommodate one Type III card or two Type I or II cards, which are slightly larger than credit cards. These slots are used to add Ethernet connectivity, hard drives, static memory, video-input, or modems using industry-standard PC cards. You can also plug an external modem into the serial port on the back panel. Other items available on the back panel are power, stereo-in, stereo-out, infrared (allows wireless communications at speeds of up to 230Kbps AppleTalk; not IRDA-compliant), and a security slot for locking the computer to a desk with an optional cable. The PowerBook 1400 has a hinged door on the back that allows access to the internal expansion slot's knockout panel, an HDI-30 SCSI connector, Apple Desktop Bus (ADB) port, reset button, and serial port. This sturdy door partially folds into the case, making it much less susceptible to breaking.

Big Bad BookCovers

Apple's designers clearly borrowed the best ideas from the PowerBook 1400's predecessors and the Wintel world, but one thing about the PowerBook 1400 is truly innovative: BookCovers. When the case is closed, the solid gray plastic panel on top can be removed and replaced with a clear plastic panel and any one of a half dozen double-sided BookCover inserts, each measuring roughly 11 x 5.6 inches. These snazzy inserts, which remind us of Screenies, were designed by professional artists, but you can create your own using the provided ClarisWorks template. Straight-laced users might view BookCovers as yet another style-over-substance Apple excess, but these goodies are more than just a novelty. Not only do BookCovers give the PowerBook 1400 a clearly unique industrial design, clever users can come up with practical uses for the inserts (see sidebar). Furthermore, who knows what type of replacement BookCover panels may be offered by third parties? We've seen samples made of brushed aluminum, bound with leather, and even covered in simulated wood. There's nothing to prevent someone from offering a panel with integrated fold-out speakers that plug into the stereo-out port, or a panel with slots for carrying pens, CDs, floppies, or PC cards.

Cracking the Case

When you open the PowerBook 1400, the screen and keyboard look a lot like a PowerBook 5300, except that the screen is noticeably larger. Regardless of which PowerBook 1400 you buy, the SVGA screen measures 11.3 inches diagonally, with a resolution of 800 x 600 pixels at thousands of colors (16 bits). We examined the PowerBook 1400c/117, which has a very nice active-matrix display that's suitable for viewing at a wide angle. If you're going to be playing a lot of QuickTime movies, this is the screen to get because it has a very fast refresh rate. Although we didn't have the opportunity to examine a PowerBook 1400cs/117 with a dual-scan display, such screens are noted for having a slower refresh rate and being difficult to read from the sides. Brightness and contrast buttons on all models are located on the right edge of the screen.

Just below the display controls is a microphone built into the case for speech recognition and sound recording. As for sound playback, there's one small speaker between the display and the keyboard. It's fine for Mac sound effects, but it doesn't deliver the high fidelity you'd want when listening to audio CDs. For that you can plug headphones into the 16-bit stereo-out port on the back panel.

The built-in keyboard has 76 (U.S.) or 77 (ISO) keys, including 12 function keys. In keeping with previous PowerBooks, the keyboard is close to the screen, allowing you to rest your palms on the case. The alphanumeric keys are full-size, and the function keys are half-height. According to Apple, the keyboard uses "scissor" technology, the same as in IBM's ThinkPads, which provides a crisp, tactile response and a soft clickity-clack noise. The power button is now labeled "On/Off" and is located in the upper-right corner, above the Delete key. It's easy to hit this key by mistake when trying to backspace, but Apple has taken measures to lessen this inconvenience. The On/Off key requires a longer keypress to activate, and even then an alert box appears offering the option to restart, sleep, shut down, or cancel, so no data will be lost.

The PowerBook 1400 features a built-in trackpad as the standard input device, but you can plug a mouse or trackball into the ADB port on the back panel. As with the trackpads on the more recent PowerBooks, you can tap and double-tap directly on its surface as well as tap and drag. Apple has altered the trackpad for better responsiveness when operated in humid climates or with sweaty fingers and has fixed the "rubber banding" problem (the cursor snapping back to a different position when a finger is lifted from the pad).

Software Sundries

The PowerBook 1400 comes with System 7.5.3 installed on the hard drive even though Apple released System 7.5.5 a month earlier (incidentally, the upgrade for this latest version of the Mac OS is available on The Disc). Apple decided it would be better to get the PowerBook 1400 out the door with an "older" System rather than delay introduction to extensively test the OS du jour running on this model.

In addition to a CD containing System 7.5.3, all PowerBook 1400s come bundled with ClarisWorks and Claris Organizer, complete with printed documentation for each. The bundle is fleshed out with the Apple Internet Connection Kit (Netscape Navigator, Claris Emailer Lite, Fetch, NCSA Telnet, and NewsWatcher), Apple Remote Access, and cross-platform compatibility software.

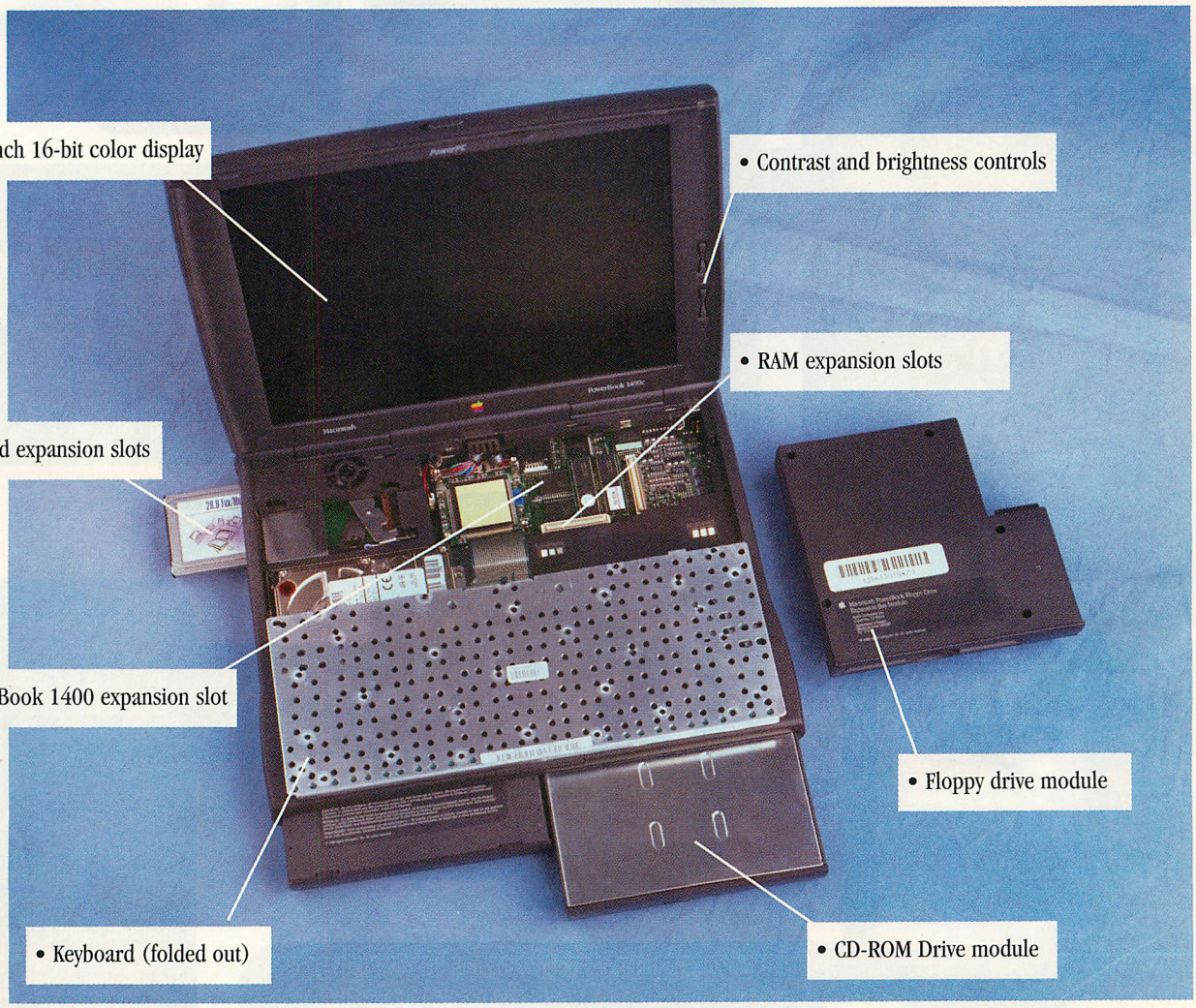
Portable Power

The PowerBook 1400 comes with a single rechargeable nickel-metal-hydride (NiMH) battery that fits into a slot on the front left. A second battery can be carried in the expansion bay normally used by the floppy or CD-ROM drive, but it doesn't provide any power in this configuration. Apple claims the battery provides two to four hours of run time, although we were not able to test this. This still doesn't compare favorably to the latest Wintel machines that get longer life from lithium ion batteries. The NiMH battery is charged whenever the PowerBook 1400 is running on AC power. We like the fact that the PowerBook 1400 uses the same type of power supply as the Duos, which only takes one outlet on a power strip due to its in-line power supply.

A Promising Return

The PowerBook 1400 is not a category killer, but it's certainly a step in the right direction for Apple's beleaguered PowerBook division. By starting with the PowerBook 5300 architecture, ironing out the kinks, and combining the best ideas from the notebook market with a few innovative features, Apple has produced a very attractive new line of competitively priced portables that should appeal to a wide range of users. Power-hungry consumers are likely to be disappointed even with the top-of-the-line PowerBook 1400c/117, but can take comfort that Apple has a much faster, albeit more expensive, model waiting in the wings.

Owen W. Linzmayer (OWL@Bigfoot.com) is the author of "The Mac Bathroom Reader." Write him via e-mail or c/o MacAddict, 150 North Hill Drive, Brisbane, CA 94005.



The PowerBook 1400 was designed to make expansion easy with its fold-out keyboard and removable heat sink and grill.

WINNERS!



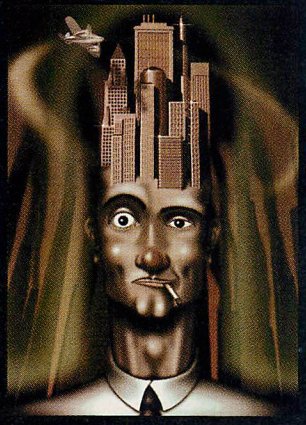
After a lot of hair pulling, in-house debating, and pizza-eating, we've managed to pick our absolute favorite entries in each of five categories: Graphics, Quicktime Movie, Web Page, System Sound, and Desktop Design. Our five lucky (and talented) winners will each receive a Power Mac 5400/120, custom-painted by the design deities at Apple Computer. We didn't plan on giving prizes to the runners-up, but we received so many entries of such high quality that we feel compelled to give them something for their efforts. Prizes for the runners-up will vary based upon individual needs.

You'll find many of the winning entries on The Disc. We couldn't fit all of them, however, due to space constraints. (For example, many of the Graphic entries and QuickTime Movie entries were many megabytes large.) Thanks to everyone who entered!

Find entries from many of the winners and runners-up on The Disc.

Grand Prize

Graphics



"Mr. City"
by Christoph Diermann

Diermann actually created the sketch for his graphic three or four years ago, after hearing a narrative performed by Ken Nordine. But it wasn't until this year that Diermann turned the sketch into a true piece of art. Diermann created the man's face in Photoshop, using paths and fills. He then created the city in Auto•de•Sys Form Z and rendered it in Strata Studio Pro. Then he composited the pieces in Photoshop. The airplane and smokestacks were added later. "I wanted the image to be a commentary on the false hopes that a city can bring," says Diermann. "There's the goodness of progress, but there's pollution also." That's just what we felt when we saw the image.

So what's Diermann going to do with his Mac? He works as a multimedia artist and graphics designer for Vroom Books, makers of children's software. "I live a long way from my job," says Diermann, "so I want to use it to do work at home so I won't have to commute everyday."

Find a list of the winners and runners-up on the Web site.

First Runner-Up

Graphics

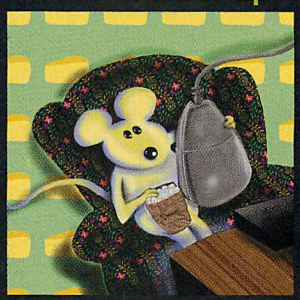


"Acid Column"
by Roberto Muñoz

Muñoz is a graphic designer who runs his own firm, The Novel Group in Miami, Florida. He created this image in Photoshop and works on a Power Mac 6100 with 40MB of RAM. As you might guess, Muños uses the standard array of graphic tools.

Second Runner-Up

Graphics

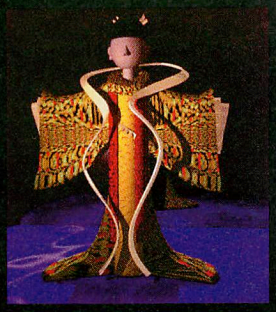


"Mousing Around"
by Leo Abbett

Yes, his name is pronounced "Abbott" and that "e" is not a typo. A professional illustrator and cartoonist, Abbett also runs his own design firm, Leo Abbett Illustrations in Brookline, Massachusetts. He claims to be a cartoonist who's been whipping up cartoons since the early 1620s—well, we think he's just a really old, funny guy. Just kidding.

Third Runner-Up

Graphics



"Kimono" by Hannah Ueno

Ueno teaches computer graphics at the Richard Stockton College in Pomona, New Jersey. What does she like best about the Mac? "You don't spend so much time doing technical things and asking "What's wrong with my computer?" she says. "You get to spend more time exploring and doing art." And, in Ueno's case, waiting for things to render.

Fourth Runner-Up

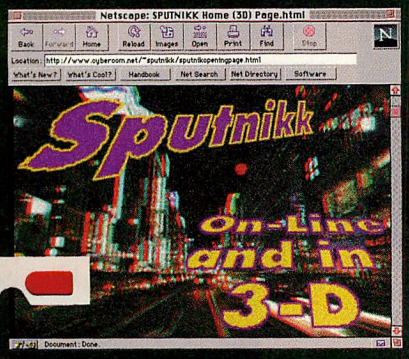
Graphics



When 15-year-old Nolan Southerland was stuck with the chore of mowing the lawn he decided he might as well mow it in the shape of the Apple logo. (Mind the copyright infringement there, Nolan. After all, we doubt this treatment is covered in the Apple handbook.) He then took a photo of the Apple from the top of a swing set, scanned it, plopped on the words, and *voilà*! An ingenious piece of art, à la Macintosh.

Grand Prize

Web Page



"Sputnik" by Eric Bertelsen

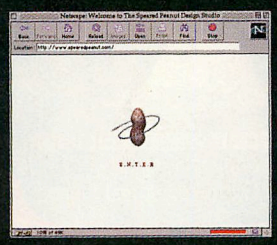
You can't really enjoy the full greatness of Sputnik without the proper equipment: 3D glasses (you know, the plastic kind with one red lens and one blue lens). Pop on the glasses and, like us, you'll say, "Cool!" A freelance graphic designer in Malden, Massachussetts, Eric was watching a Discovery Channel program on virtual reality and thinking to himself, "How do I do this online and make it cool? Everyone has the same stuff." He picked up a book on how to make 3D images and started experimenting. You'll have to grill him, however, on exactly how he created the images. Although he did 'fess up to looting old games he bought at thrift stores for his 3D glasses.

What did Bertelsen think about winning the Power Mac? "Oh my god. No way! No waaaay! NO WAY!" Surprised, were you?

http://www.cybercom.net/~sputnikk/sputnikopeningpage.html

Second Runner-Up

Web Page



"Speared Peanut" by K & P Kremer

Simplicity and easy navigation combined with charming graphic touches were what made this site a runner up. The husband and wife team of Paul and Kristina Kremer run a design business out of their Houston, Texas home. The business name, Speared Peanut, came about as Kristina was munching a pickle and Paul was eating a peanut butter sandwich.

http://www.spearedpeanut.com

First Runner-Up

Web Page



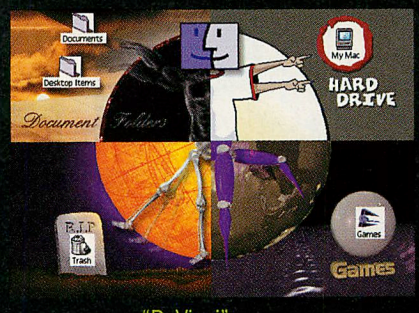
"MacAddict" by Mike Yrabedra

http://www.dawghouse.com/MacAddict

No, this really wasn't our attempt to give a prize to the best suck-up site. (In fact, we had far more sucky-up attempts from which to choose). This site impressed us with its clever use of technology. For example, pass the cursor over the grow boxes on the left and windows pop down. You'll need Navigator 3.0 to see all the gizmos, however.

Grand Prize

Desktop

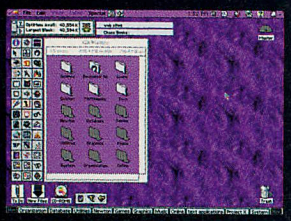


"DaVinci" by Erik Lauritzen

Lauritzen's desktop design caught our attention not only for its compelling imagery, but for its overall functionality which incorporates the Mac's icons in an elegant way. Lauritzen used Fractal Painter for the left half of the image, Specular Infin-D to create the bottom right of the image, and Macromedia Freehand to create the top right of the image. His custom-painted Mac is going to good use. Lauritzen is studying computer animation at the Art Institute in Houston, Texas.

First Runner-Up

Desktop

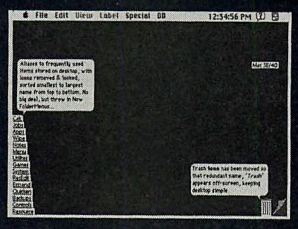


"Handy Desktop" by R. Craig McCollough

McCollough's submission must be one of the most well-organized, efficient desktops we've seen in a while. (Well, okay, maybe except for Kathy Tafel's here at MacAddict). A job well done.

Second Runner-Up

Desktop



"Black and White" by Dave Mitchell

With his entry form Mitchell wrote "The Mac OS makes it possible to get the most out of very little system resources, keeping older Macs productive. Just try running Windows on a nine-year-old PC!" Kudos to Dave for making the most out of a Mac SE desktop.

Third Runner-Up

Desktop



"Trash Can Camo" by Tom Ostromecki

A staff favorite just on sheer outrageousness, Ostromecki's tiled trash can icons made us laugh out loud. It also made our eyes hurt—some of us anyway. So now tell us Tom, just which one is the real Trash?

Fourth Runner-Up

Desktop

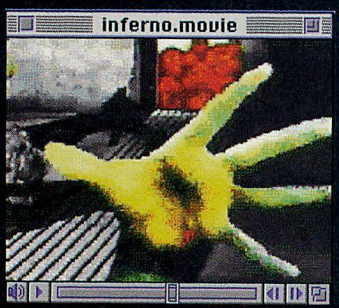


"Lizard Eye" by Patty Minardi

We love the big eye and the wonderful background texture. But what really won us over were the three icons that made up a giraffe neck: Stuff, More Stuff, and Even More Stuff. Clever.

Grand Prize

QuickTime Movie



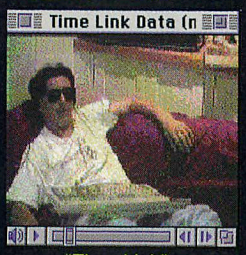
"Inferno" by Csaba Tamasi

In this stirring movie, Tamasi combines images and an original soundtrack to create an insight into his idea of a modern day hell—Hitler's Nazi Germany. Tamasi created the movie after reading Dante's "Inferno" while in college. It took a variety of programs, including Adobe Photoshop, Strata Studio Pro, Adobe Premiere, Adobe After Effects, Fractal Painter, Adobe Illustrator, Macromedia SoundEdit Pro, and eight months to complete. Tamasi recently started a job as a graphic designer and 3D animator with Vertigo, a software company in Vancouver, BC.

What's he going to do with his Mac? "I'm going to enjoy it," says Tamasi. "I'm just going to use it to death."

First Runner-Up

QuickTime Movie



"Time Link" by Mike Frager and friends

In this funny, wonky movie, an evil virus named Beta Gates tries to travel back in time to steal ideas that he can use to get rich in his current day. In order to prevent this from happening, our hero, the Time Daemon, must beat the virus in a remote game of Pong. The concept was created by three 14-year-old Oxford, Ohio residents during their summer break.

Second Runner-Up

QuickTime Movie



"Valentine" by Matthew Lindberg

A small, touching movie with a whispy heart and flowing arrows (Cupid's, of course) set to appropriately romantic background music. The *pièce de rèsistance* is the sweet tag line that scrolls up. Take a little look for yourself.

Sound

Grand Prize

"Funky Mac" by Ty Cashen

By taking a snippet from New Order's "Blue Monday" and adding classic Mac sounds (mouse clicks and system beeps, for example), Cashen created a startup sound that had us all tapping our feet and bopping our heads. What is Cashen going to do with his new Mac? "I think I'll go to DisneyWorld online." But then he backed out, saying he'd more likely be busy cranking out more phat tunes that he could play while finishing his evil college essays (at Colorado University in Boulder, Colorado), surfing the Net, blasting aliens in Marathon, and, of course, spinning those MacAddict CDs, all within his Mac's "totally cool custom-painted case."

First Runner-Up

"PhenomeNah" by Chris Hart

This happy, little tune comes from Manchester, Connecticut resident, Chris Hart. His creation is a weird merging of a Star Trek: Voyager episode and various Sesame Street flashbacks. You can hum along, too!

Second Runner-Up

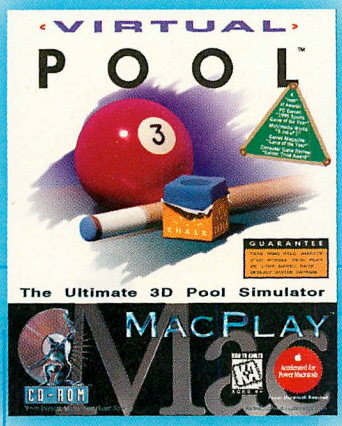
"What the... " by Mike Miller

"We've secretly replaced Bob's Macintosh with Windows 95. Let's see if he can tell the difference... "

"What the hell is this crap?" Need we say more about this "Folgers' Moment" entry?

MACPLAY

Mac OS

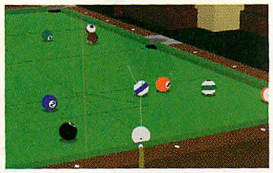


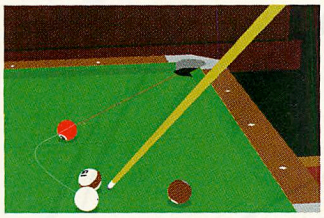


PUT SOME ENGLISH ON... TAKE SOME ENGLISH OUT.

Virtual Pool™

It has all the angles and all the shots. A game so real we guarantee that it will improve your actual pool game... or your money back!





Conquest of the New World™

Exploration, Deception, Conquest, Victory. Do you have what it takes to build the ultimate nation?

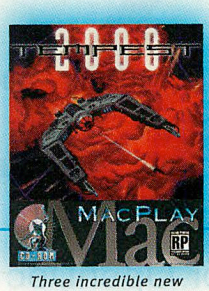




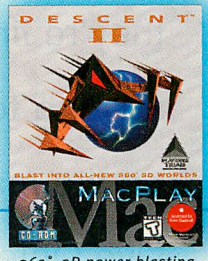
HOLIDAY RELEASES...



The only pinball game with 4 different action packed games with 1–6 ball simultaneous game play.



Three incredible new 3D versions of the incredible legend.



360° 3D power-blasting sensory insanity

Virtual Pool ©1996 Celeris, Inc. All rights reserved. Conquest of the New World ©1996 Interplay Productions. All rights reserved. Developed by Quicksilver Software, Inc. Pro-Pinball ©1996 Entertainment International (UK) Limited. All rights reserved. Empire Interactive, Pro-Pinball and The Web (used in conjunction with Pro-Pinball) are trademarks of Entertainment International. All rights reserved. Tempest 2000 ©1996 Atari Corporation. All rights reserved. Licensed from Atari Corporation. Descent II © 1996 Parallax Software. All rights reserved. Virtual Pool, Conquest of the New World, Descent, MacPlay and Interplay are trademarks of Interplay Productions. All rights reserved.

MACPLAY™

YOUR PREMIER MACINTOSH GAME SOURCE

http://www.macplay.com

They're cheap, they're fun, and they're heeere. They're Live Objects.

by David Reynolds

Although their new name sounds a little creepy, Live Objects (formerly OpenDoc parts) have arrived and are anything but creepy. These compact programs do incredible word processing, display dynamic 3D charting, and make spiffy interfaces through custom buttons. And they're finally starting to appear on the market. Eleven Live Objects or OpenDoc container applications are now shipping. Several more should be available by January.

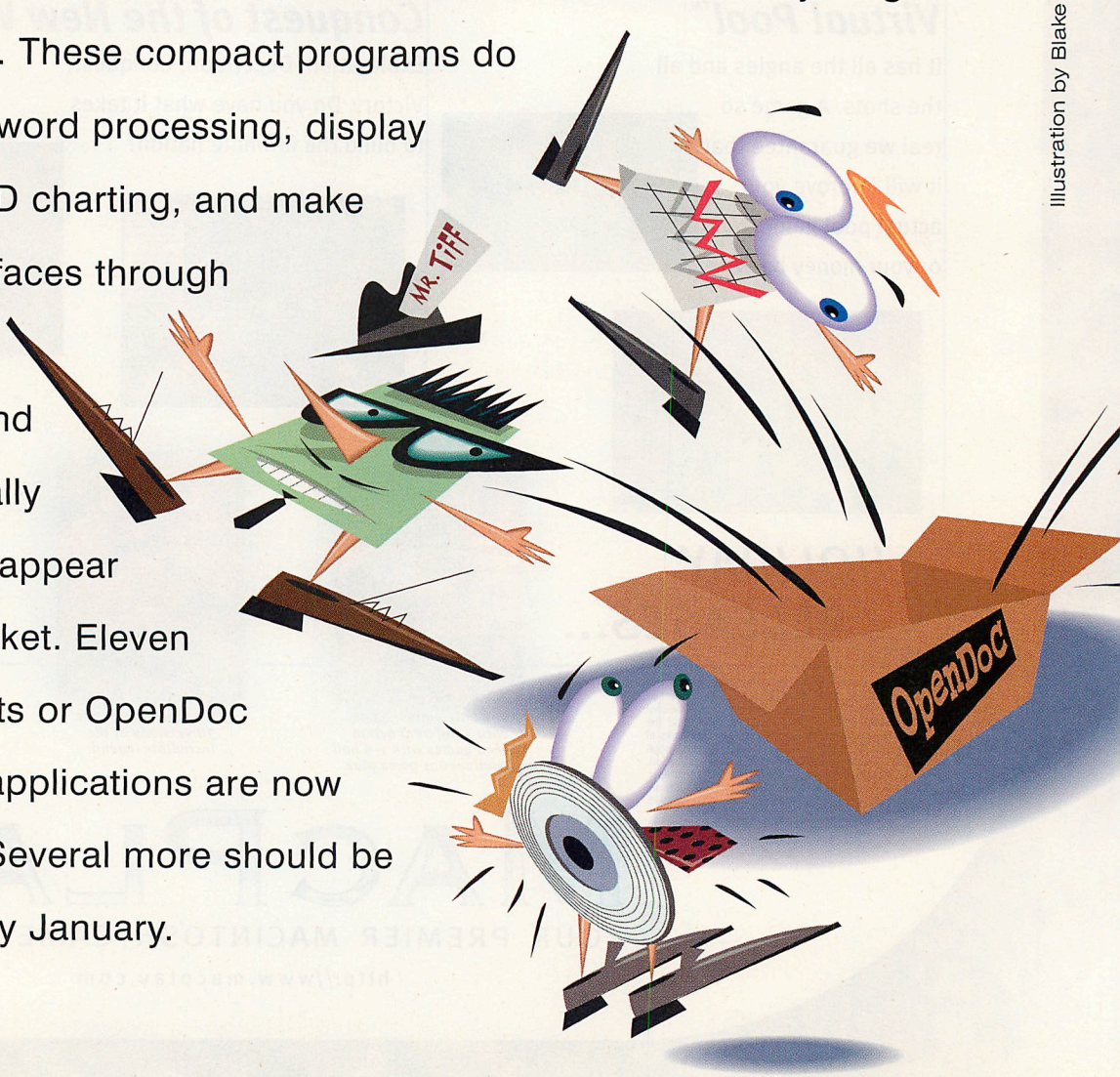


Illustration by Blake Thornton

FIND OPENDOC and several Live Objects on The Disc.

If you're not familiar with OpenDoc yet, you should be (see the premiere issue of MacAddict for "OpenDoc Rocks," an article that fully explains this new Apple technology—Sept/96, p36). OpenDoc will become more tightly integrated with the Mac OS as time goes on, and some heavy (but not well-known) hitters have stepped up to take advantage of this technology. Think of OpenDoc as the ultimate incarnation of drag and drop. In an ideal OpenDoc world, there are no applications. Instead, you build your documents from the ground up, dropping in a text part here, a spreadsheet part there, a charting part elsewhere, all linked to each other, and the Internet if so desired, for real-time updating.

Because of its open nature, OpenDoc has tremendous potential. OpenDoc is now available for the Mac OS, OS/2, and Windows—that's right, Windows. IBM introduced a beta version of OpenDoc for Windows at Macworld Expo in August, so expect Live Objects that can cross the Microsoft barrier to appear in the next six months. Aside from Apple and other OpenDoc partners such as IBM throwing their considerable weight in a favorable direction, OpenDoc will continue to grow for three reasons: the parts are inexpensive (because they do only one thing); they let you do things you can't do with application-based software; and they are just plain fun.



Cheap, Cheap, Cheap

Because software developers can concentrate on doing only one thing while making a Live Object, the part sizes tend to be small and so do the prices. Live Objects sell for between $14.95 and $150 (with a median of around $40 to $50). That's much cheaper than their application-based counterparts.

Under $20

Such inexpensive software usually is the equivalent of a first-person texture-mapped shooter done in HyperCard—overpriced for its value. Not so with Live Objects. For under $20 (srp) you can buy these four parts that do nifty things in any OpenDoc document:

- **SoftLinc's Lexi.** This $19 spell checker lets you check text spelling by merely dragging the text onto the part. Add Lexi to any word processing Live Object, and you've just added a practical feature for peanuts.

- **Corda Technologies' CGraph and CTable.** This pair of parts creates, respectively, graphs and tables. For $19.95 each, these components add spreadsheetlike functionality to any OpenDoc document.

- **Hutchings Software's Rapid-I Button.** This nifty part lets you create custom buttons that can use pictures, text, and other Live Objects for their appearance while providing more flexibility than its Apple-spawned counterpart. All that for only $14.95.

$20 to $50

Most OpenDoc parts can be had for under $50, which is considerably less than the price of many applications on the market. As an example of how Live Objects can save money while providing only the features you need, take the word processor. If you need text formatting and spell checking but don't need outlining, buy WAV ($49) and Lexi's basic spell-check part ($19) for a total expenditure of $68. If you change your mind and decide that you want to add outlining, buy Outliner ($29), bringing your total to $97. Under $100 for a word processor that can do all this and has built-in Internet access through Cyberdog? Believe it, bub. It's true.

- **Digital Harbor's WAV.** It's parts like this that make us really wish Apple had come up with a different, more-powerful-sounding term than "part." This $49 word processing tool offers features that you can't get in word processing packages that cost twice as much.

- **SoftLinc's Lexi.** This deluxe word-services package provides a spell checker, a thesaurus, a translation dictionary, and verb conjugation—and has been optimized to work with WAV. How much? $45.

- **Eclipse Services' Outliner.** For $29, you can get your hands on Outliner, which creates traditional outlines or incorporates Live Objects into its outline.

$50 and Up

Once the price tops $50, you enter the realm of container applications or application/part combinations. These are more like the traditional applications that can either take advantage of OpenDoc parts or create content that can be used in OpenDoc documents.

- **Totally Hip's Web Painter/Sizzler.** This combination product ($99.95/free viewer) lets you create animations, which you then can view in any OpenDoc document (provided the viewer is present).

- **ClarisWorks, Nisus Writer, WordPerfect, and WorldWrite.** All of these popular applications will support OpenDoc by the end of 1996. (You might have noticed that Microsoft Word isn't on this list. Well, a technology called Component Glue will eventually let Word contain parts that are OLE-aware—parts that recognize OLE, Microsoft's competitor to OpenDoc).

These aren't the only players in the OpenDoc game. Apple will offer a collection of Live Objects for Macs by the end of the year. The Apple Live Objects Essentials Kit for Mac OS (the name just rolls off the tongue) will include basic text and graphics creation tools as well as support for the QuickTime flavors and PICT, GIF, JPEG, and TIFF image file formats.

Wow, Mister Wizard, since they're such a great value, how do I buy my Live Objects? Although you may see Live Objects in the stores, expect to see them sold over the Internet in an experiment in digital commerce. Several wired distribution paths have opened up. You will be able to purchase Live Objects at Kantara's PartBank (http://www.partbank.com); it maintains a library of objects available for purchase. You should also be able to purchase them from C/NET (http://www.buydirect.com), where you can also buy browsers, plug-ins, applets, and Internet utilities.

Brand-New Features

OpenDoc lets you do things that you can't do in traditional applications, such as:

- Open a Web page inside your word processor.

- Drag and drop a QuickTime movie into your spreadsheet.

- Create your own control module that has an audio CD controller and buttons for your favorite Web sites and applications.

Just try to do these things with your non-OpenDoc applications.

With WAV, you can access the Internet (mail, news, World Wide Web) through Cyberdog, and drag and drop images and text directly into your WAV document. Want to include a QuickTime movie in a spreadsheet (for some unfathomable reason)? Again, it's as easy as drag and drop. But you can be even more creative. By cleverly scripting some Rapid-I Buttons, you can make a control module that links to your favorite Web sites and launches your most-often-used applications. If you drop a CD controller onto the document, you can play your favorite audio CDs, too. Just drop the control module document onto your Startup Items folder, and it will come up every time you start your Mac.

They're Just Fun

Live Objects are just plain fun, kind of like Legos. The reason they're fun is the freedom that OpenDoc technology allows. Remember the first game you poked around, doing things that the developers might not have had in mind? You can do the same thing with Live Objects. Because you can add any Live Object to almost any document, you may be able to do things that surprise even you. Take Apple's advice: Mix and match Live Objects to your heart's content.

OpenDoc Glossary

CILabs: The independent standards body that puts OpenDoc parts through grueling, torturous tests so that they can proudly bear the Live Objects name and logo. See also Green Berets.

Component: Overly technical word for a software part. Used primarily by those with a slight inferiority complex who try to compensate by using big words.

Container: A part that can hold another part, much like a bottomless piece of Tupperware.

Container Application: An application that can hold an OpenDoc part and has several other functions that almost no one will use.

Editor: A piece of OpenDoc software that allows you to view and change the content of a part.

Embed: To put one part in another is to embed it. In the event of a Type 11 Error, it's like embedding a straw into a tree in a tornado.

Live Objects: The vaguely Twilight Zone-esque new name for OpenDoc parts after a focus group determined that no one knew what the hell OpenDoc meant. Remember, only OpenDoc parts certified by CILabs can be called Live Objects.

OpenDoc: The name of the technology that gives life to Live Objects.

Stationery: A never-ending source of an OpenDoc part. Works like conventional Macintosh stationery.

Viewer: A piece of OpenDoc software that allows you to view the content of a part, kind of like a View Master.

DAVID REYNOLDS has more than eight years of experience in both print and broadcast journalism. David was amazed to find out that Sweden has the largest number of OpenDoc developers in Europe. If only buying parts for his new motorcycle (yes, it's a Harley) were as easy (and cheap) as buying Live Objects, he'd be a happy guy.

Who Makes It
What It's Called
What It Costs
When It Ships
What It Is
Why It's Cool
Where to Get It

Adrénaline Numbers
PRICE: TBD
SHIP DATE: January
CONTACT: 418-658-9909; http://www.adrenaline.ca
A spreadsheet part with 149 functions and several file filters, Numbers can get and display live information such as stock quotes across a network.

Adrénaline Charts
PRICE: TBD
SHIP DATE: January
CONTACT: 418-658-9909; http://www.adrenaline.ca
The Charts program uses QuickDraw 3D to produce 25 kinds of stunning 3D graphs that are drag-and-drop easy. Graphs can be twisted and turned in space while being continuously updated with changing Adrénaline Numbers data.

Amplified Intelligence 3DogVR
PRICE: TBD
SHIP DATE: January
CONTACT: 916-737-1550; http://www.amplified intelligence.com
3DogVR (great name!) lets you navigate 3DMF files (and possibly VRML 2.0 files) and supports stereo viewing. You can drag URLs onto 3D objects to link them to the Internet.

BareBones Software BBEdit
PRICE: free
SHIP DATE: Available now
CONTACT: 617-676-0650; http://www.barebones.com
This serious, powerful text-editor does speedy search-and-replace operations on large quantities of text. It uses "Grep" pattern-matching rules to increase the power of text searches. As a part, you can use it to work on source material within a CyberDocument.

Corda Technologies CGraph
PRICE: $19.95
SHIP DATE: October
CONTACT: http://www.corda.com
This graphing part uses drag and drop to make custom graphs. Data can be graphed from another part or can be entered directly into the graph. Because it's also a container, CGrapgh can hold other Live Objects for extensive customization. Imagine putting a graph into your word processor and then putting your word processor into that graph (say, for annotating).

Corda Technologies CTable
PRICE: $19.95
SHIP DATE: October
CONTACT: http://www.corda.com
The companion part to CGraph, CTable uses a variety of borders and fill styles to create custom tables for OpenDoc documents. Links can be set up between CTable and CGraph to provide updates to graphs when the table is updated. CTable is also a combination part/container.

Digital Harbor WAV
PRICE: $49
SHIP DATE: October
CONTACT: 801-785-2115; http://www.dharbor.com
WAV is a 1.4MB word processor with nifty features that you won't see in any other word processor. WAV supports several file formats, including RTF, HTML, and Word, and has a built-in Cyberdog tab. Other functions include a dynamic cursor (click on the middle of a blank page and the cursor appears there) and dynamic text wrap (drag an object around a page and the text flows around it on the fly).

Eastgate Systems Web Squirrel
PRICE: $49
SHIP DATE: Available now
CONTACT: 800-562-1638; http://www.eastgate.com
As its name implies, Web Squirrel collects and stores Internet resources in its little digital tree. It creates maps of Internet resources that can be embedded in OpenDoc documents. The maps work with Cyberdog to automatically update themselves. And it uses agents, and those are pretty hip.

Eclipse Services Outliner
PRICE: $29
SHIP DATE: September
CONTACT: 610-352-6800
Outliner does what it sounds like it might do—outline. Live Objects can be dropped in, allowing you to create an outline made of all kinds of information. Outliner will be included in the upcoming collection of Live Objects sold by Apple.

Hutchings Software Rapid-I Button
PRICE: $14.95
SHIP DATE: Available now
CONTACT: http://www.hutchings software.com
This part deceptively acts like other OpenDoc buttons, but it's more flexible than its Apple-spawned counterparts. You can change how Rapid-I Buttons look when clicked; they can have text, pictures, and other Live Objects as labels (for example, a Sizzler animation can be used as a link to an animation Web page); and they can play sounds, run AppleScripts, and open files or folders in the Finder as well as open CyberItems or query databases.

MetaMind Page Composer!
PRICE: $25 (Lite), $50 (Grand)
SHIP DATE: October (Lite), January (Grand)
CONTACT: 415-381-8063; http://www.nbn.com/people/minds
Page Composer! works like a conventional page layout program, providing a canvas area, zooming, guides, rulers, and a tool palette. You place text and graphics by dropping Live Objects onto the page as opposed to drawing text boxes and importing graphics. The Grand version includes multipage sections and AppleScript support.

OnBase Technology DragNet
PRICE: $39
SHIP DATE: Early 1997
CONTACT: 714-830-5682; http://www.onbasetech.com
DragNet lets you drag and drop URLs to and from a bookmark list. As a part, it replaces Cyberdog's notebook. It adds organization features that Cyberdog's notebook lacks.

SimCalc Parts
PRICE: free
SHIP DATE: Available now
CONTACT: http://tango.mth.umassd.edu
These parts are actually six components that teach mathematical concepts involving motion simulation. They cover particle trajectory; graphs and digital readouts of position, velocity, and acceleration; and the ability to drive a particle with a mouse or an equation. A document, SpeedWay, puts these parts together to allow you to drive, ride in, or view a car in a 3D world. These parts are optimized to work with WAV.

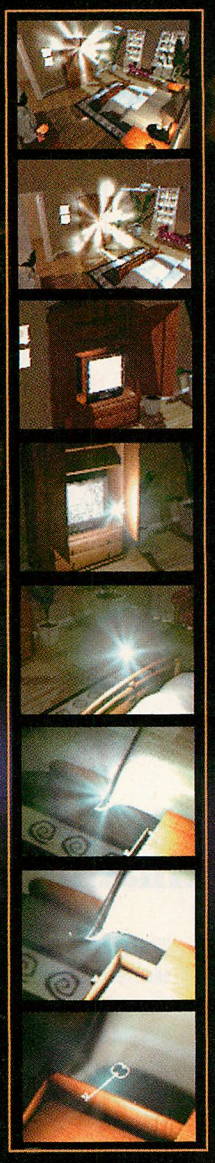
SoftLinc Lexi
PRICE: $45 (suite)
SHIP DATE: October
CONTACT: 941-642-7979; http://www.softlinc.com
Lexi includes a spell checker, a thesaurus, a translation dictionary, and verb conjugation features. It works with Live Objects that handle text and has been integrated with WAV. You merely drag and drop text onto Lexi and let the part go to work. The spell checker alone is $19; the spell checker and thesaurus are $29.

Totally Hip Web Painter/Sizzler
PRICE: $99.95
SHIP DATE: Available now
CONTACT: 604-685-6525; http://www.totallyhip.com
Web Painter is an application for creating animations; Sizzler is the viewer that lets you see the animations in your document. These animations look simply stunning even if they are just hanging out on an OpenDoc document.


Don't Go
Online
Without
the Net
To get your FREE ISSUE and DISC of The Net,
call 1-888-4IMAGINE today or visit our
Web site at: http://www.thenet-usa.com
You'll receive 11 more issues with discs (12 in all) for only $24.95—
a savings of over 55% off the cover price! If you're not completely
satisfied, write "cancel" on your bill and owe nothing.
Offer good in US only and expires 12/31/96. Please allow 4–6 weeks for delivery of first issue.
Canada: $US 38.95 (includes GST). Foreign: $US 48.95. Prepaid in US funds.
5TNH7

AMBER

Journeys Beyond™



Death Is Not The End

An adventure game of supernatural beauty & haunting elegance for MacOS™.

Journey into the unknown, unravelling mysteries hidden within compelling stories of heart-rending tragedy, mind-numbing obsession, and child-like innocence.

Mac OS

Accelerated for Power Macintosh

http://www.changeling.com

HUE FOREST ENTERTAINMENT

Changeling

Mac, PowerMacintosh, and the MacOS logo are trademarks of Apple Computer, Inc., used under license.
All logos and trademarks are property of their respective owners.

reviews

Carnage Forever! Marathon Infinity—need we say more? Oh, and useful stuff, too.

CorelDRAW 6 Suite

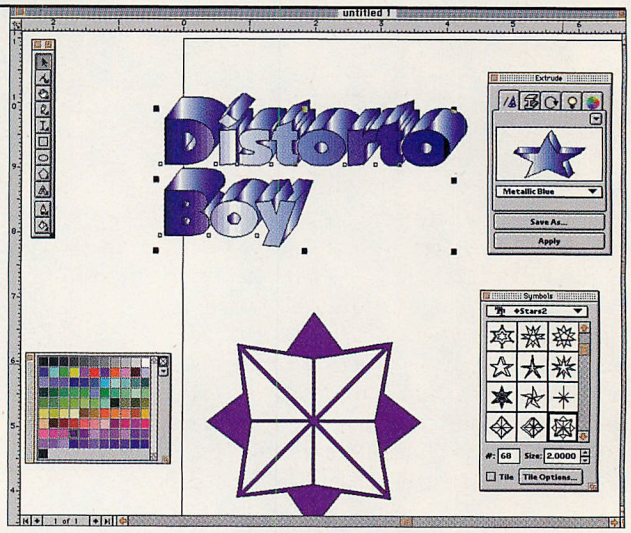
FREAKIN' AWESOME

SPIFFY

YEA, WHATEVER

BLECH!

DEVELOPER: Corel
CONTACT: 613-728-8200; http://www.corel.com
PRICE: $595 (srp)
REQUIREMENTS: PowerPC, System 7.5 or later, 20MB of application RAM, 40MB of hard drive space, 256 color monitor with minimum of 640 x 480 resolution, CD-ROM drive



OOZE AND EXTRUDE: Here's one thing CorelDRAW does, and does well. It comes with a huge collection of strange shapes, too. With other programs, you'd need another application to do this.

Windows software ports are, quite frankly, a pain. The undeniable advantage of the Mac OS is the ease and intelligence of the interface, and when an application slaps Window-like boxes all over the place, the user has to fight to accomplish the simplest tasks. This goes double for CorelDRAW 6 for Macintosh. A friend who teaches a class on CorelDRAW every so often refers to it as "Satan's Drawing Software of Choice." We always did wonder who did the logo work for that Pentagram...

However, there are heavenly aspects of Corel's package. Priced at the same point as its Mac-based rivals (and single-function applications), Adobe Illustrator and Macromedia FreeHand, CorelDRAW Suite offers an abundant set of programs and files, clip art, fonts, and more. In addition to the standard CorelDRAW 6 package, the suite includes: Corel ARTISAN 6 (a pixel-based image-editing program that supports most Photoshop plug-ins); CorelCHART 6 (a surprisingly robust graphing package); CorelDREAM 3D 6 (a rebadged version of Fractal's Ray Dream 4.0); Corel MULTIMEDIA MANAGER 6 (an image database organizer similar to, but not as useful as, Fetch); CorelTEXTURE 6 (an easy and fun, albeit slow, texture generator); Corel TRACE 6 (which converts bitmap images into vector formats); MasterJuggler 2.0 Pro (a font organizer); and Corel WordPerfect 3.5. This last is the second-place word processor that just can't seem to gain ground on the behemoth Word, even though it's snappier, has an almost as robust feature set, and the entire world seems to hate/fear Microsoft. Whew. Got all that? And Corel is aggressively building inroads on the Macintosh. It is offering a $149 "crossgrade" to current owners of FreeHand or Illustrator. It seems Corel is wagering that Mac users will be so tempted by the value that they'll grab the package just in case they may want a few elements from this rather heavy box.

Still, CorelDRAW 6 is the main ingredient of the package, and the entire package "value" is rooted in how good this particular piece of software is. CorelDRAW 6 is the PC world's king of drawing software, with Adobe Illustrator version 4.1 for Windows a distant second, and Macromedia FreeHand 5.5 for Windows lagging far behind. Has the PC world been onto something that we in the Mac world have been missing?

Well, CorelDRAW isn't lacking in any significant areas, but neither does it have any features so outstanding that it will lure you from the drawing application with which you're currently happy. It is, to twist a phrase from developers, feature-compliant to high-end illustration software.

The more critical area in which CorelDraw doesn't quite live up to Macintosh standards is all too predictable: interface. It doesn't seem that the Corel engineers and development team spent any time at all with other Macintosh graphics applications, it's as though the research done was just for the sake of seeing what worked for Mac OS folk. Instead, Corel has taken the high road and figured it would be better to teach us something about

tips: What Do You Want?

What does CorelDRAW have that Illustrator and FreeHand don't ?

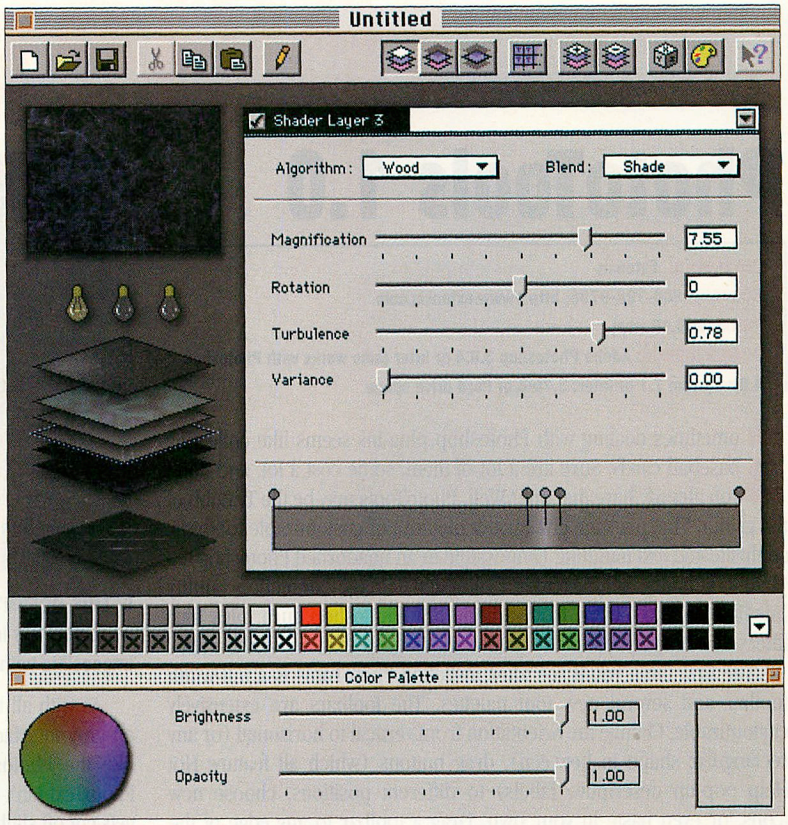
- PowerLines that create predefined, tapered lines that simulate drawing with a pressure-sensitive tablet.
- Extrusion
- The ability to turn outlined type back into editable type
- Custom print styles

... however, CorelDRAW lacks these features that both Illustrator and FreeHand have:

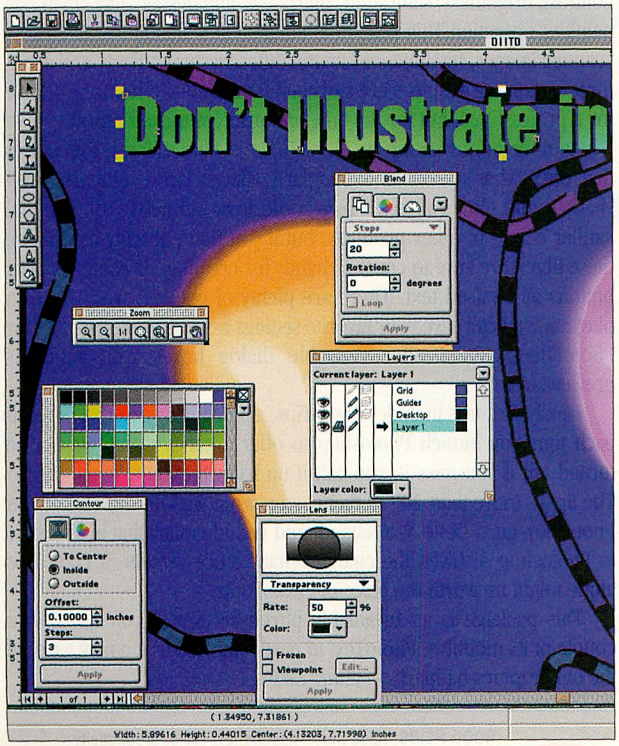
- Floating text palette
- Pressure-sensitive support
- Knife tool for slicing paths
- Support for 3rd-party plug-ins (bitmap and vector)
- Bitmaps generated from vectors
- Custom dashes on strokes
- Print individual layers

software usability. To that end, it won't take more than a few minutes of zipping around in CorelDRAW 6 for a typical Mac user to start cursing and spewing out profanities because nothing seems to work. Let's start with what Corel tried to do to make a Mac more like a PC. First, since we poor Mac users don't have a right mouse button (we'll take our carpal tunnel via the keyboard, thank you), pressing the control key flips the mouse button into right mouse button mode. This is useful for Windows junkies who miss their extra mouse button, but not for anyone else. Corel has also managed to retain (and possibly increase) the annoying flicker that occurs when you draw with any tool, or move an object around the screen. Actually, you don't really "move" anything. You move a generic rectangular marquee instead, which takes some getting used to. Want to switch tools? How about the old DOS convention of tapping the spacebar? And then there are the giant squares for handles that pop up when an object is selected and hide big chunks of the illustration.

Palettes are everywhere for everything... sort of. Other programs without tabbed palettes such as Illustrator and FreeHand (pre-v.7) can effectively turn drawing into a game of hide and seek, but when you're editing text, it would be nice not to have to pull up a modal dialog box as you have to in CorelDRAW 6. There doesn't seem to be any regularity to why a particular function is a palette, and how the palettes are set up. Possibly the most annoying thing about these palettes is that moving them causes a screen-wide redraw. Between that and the flicker problem described above, Corel might want to consider affixing an epileptic seizure warning label to the box.



LAYERS UPON LAYERS: With CorelTEXTURE's fairly straightforward and sensible illustration (see the layers on the left), even novices can build fairly complex textures. It's still slow, though.



A PALETTE FOR A ZOOM? Not only does CorelDRAW eliminate many standard keyboard shortcuts, and change icon usage, but if you try to uncover any of your art by moving a palette, you'd better be ready for a full screen redraw.

The software is solid overall, opening Illustrator documents with which even FreeHand struggled, and performing fairly complex transformations and other operations without a serious crash. Also, it seems to be uncrashable—we tried, and tried hard, but CorelDRAW wouldn't break. Unfortunately, many complex operations tend to be slow. Really slow. Even on a very powerful Mac. It's difficult to ascribe this to anything but bad porting.

What if you threw a party and nobody came? Corel should be asking itself this, as it has managed to deliver an exceptionally valuable set of tools at a low, low price, if you do one of those cool "crossgrades." Unfortunately, all the software (with the exception of WordPerfect, which was excellent before Corel acquired it) has a Wintel aftertaste to it, which is certain to turn off Mac users. Will Illustrator or FreeHand users switch to CorelDRAW for the Macintosh? Not likely. Much more likely is the reverse—if Adobe ever gets on the ball and releases a current version of Illustrator for Windows.

The final warning: A complete installation of CorelDRAW 6 Suite takes up 240MB on your hard drive. Yeah, a quarter-gig. The CorelDRAW application folder is 43MB of that. Microsoft is finally number two in at least one area... *—Ted Alspach*



GOOD NEWS: Value for crossgraders. Includes the excellent WordPerfect 3.5. Stable and functional. Opens Illustrator 5 files.
BAD NEWS: Slow; a memory and storage hog. Quirky Window/DOS-like interface. Flicker mania quickly gets tiresome.

reviews

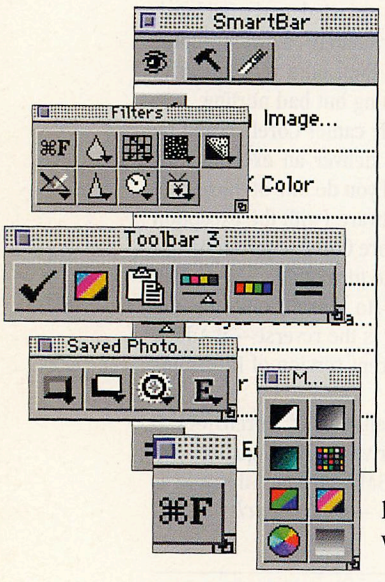
PhotoTools 1.0

DEVELOPER: Extensis
CONTACT: 800-796-9798; http://www.extensis.com
PRICE: $99.95 (srp)
REQUIREMENTS: Adobe Photoshop 3.0.4 or later (also works with Photoshop 4.0); System 7.1 or later; 3.7MB of hard drive space

Sometimes dealing with Photoshop plug-ins seems like collecting baseball cards: Sure are a lot of them, some cost a lot, and don't you already have that one? Well, PhotoTools may be the Ty Cobb of the group. This package gives you a plethora of customizable toolbars, sophisticated text handling (impossible in an unadorned Photoshop), a "Lite" version of Extensis' one-step image-correction utility Intellihance, lots of tips from a bona fide Photoshop guru, plus four filters that simplify workaday tasks such as drop shadows and bevels.

The first thing you'll see after installing PhotoTools is a full-width toolbar and several new tool palettes. The toolbars are extensively customizable: Change the orientation from vertical to horizontal (or any rectangular shape in between), drag buttons (which all feature Hot Help pop-up descriptive labels) to different positions, choose new icons, or even paste in your own. Drag a toolbar to any edge of the screen, and it snaps to the edge and turns into a tool ribbon. Drag it away, and it turns back into a floating palette. What's more, PhotoBar buttons provide direct access to Photoshop commands, filters, and menus; load often-used files; and even launch other applications. Altogether, this is the slickest implementation of toolbars we've seen.

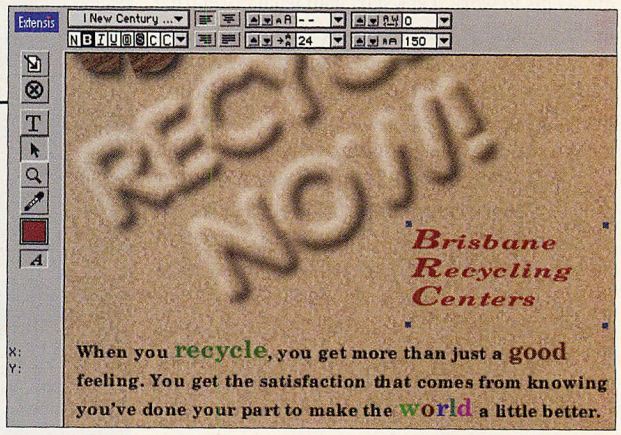
One palette, the SmartBar, has a neat trick: It "watches" what you're doing and remembers the commands you use most often—the Super Boomerang "most recent" principle applied to tools. A mouse click combines these actions in an independent toolbar. This is especially handy for repetitive work that involves a series of combined tasks.



THESE ARE YOUR HELPERS: But you don't need more than one or two on screen at any time, so don't panic. Hot Help lets you know what each button is as you pass the cursor over it.

The PhotoTools element most likely to make users jump and shout is the PhotoText module. Photoshop's text handling is, to put it bluntly, terrible: All text in a block has to be the same font, size, style, and so on. PhotoText erases this limitation, opening up Photoshop to the big world of text handling.

This breakthrough plug-in is a total replacement for Photoshop's Text tool, supercharged with features such as unlimited, resizable text blocks and full justification. Within each text block you can freely mix fonts, sizes, styles, colors, leading, tracking, kerning, and character widths. (About the only things PhotoText won't do are tabs and tables.) It's almost like having PageMaker at your fingertips while working in Photoshop.



IF THIS DOESN'T ROCK YOUR WORLD: then you haven't tried to work with text in Photoshop much. Any of these tricks is, basically, impossible without PhotoTools.

As with all the palettes in PhotoTools, PhotoText has a drab gray-on-gray interface that looks a lot like Windows (and, unfortunately, like the Photoshop 4 interface), though for all its nifty features, PhotoText isn't perfect. When using justified italic text, the text block gets cut off slightly at the right edge. (Extensis is aware of the problem and should have a fix by the time you read this.)

Intellihance is a free-standing utility that is marketed separately by Extensis. The Lite version in PhotoTools suffers little in comparison. Intellihance Lite scans your image and decides how best to enhance contrast, brightness, saturation, sharpness, and despeckling, all in one painless operation.This plug-in is smart: On a handful of dissimilar scanned images, Intellihance Lite ran different sets of filters, and about three out of four results were a distinct improvement. It's no substitute for a professional, but for the time and price, you can't beat it.

Another bonus group in PhotoTools is PhotoEffects, four filters that offer what are by now standard effects: bevel, emboss, drop shadow, and glow (all are a pain to do from scratch). You can find similar effects in other products, but if you don't already have them, these filters are sure to come in handy for creating 3D effects such as buttons and raised text. There are plenty of controls with which to play, and you can save your favorite settings as named presets. All four PhotoEffects filters offer resizable dialog boxes with generous preview areas.

Finally, Extensis includes PhotoTips, a little dialog box that pops up each time you launch Photoshop to offer a handy tidbit. (It can be turned off; if you miss it, you call it up from the PhotoTools menu.) The tips—more than 200 of them—are from well-known author and Photoshop guru Deke McClelland, and include many that are specific to Photoshop 4. Given the changes made since version 3, PhotoTips alone might be worth the price of PhotoTools.

This package is an invaluable purchase even if you use only a couple of its modules. PhotoText in particular makes it a new game at the old graphics ballpark. —*Andy Baird*



GOOD NEWS: Adds much-needed text tools, productivity-enhancing toolbars, and useful filters.
BAD NEWS: Bars and palettes can take up valuable screen real estate.

Macworld says

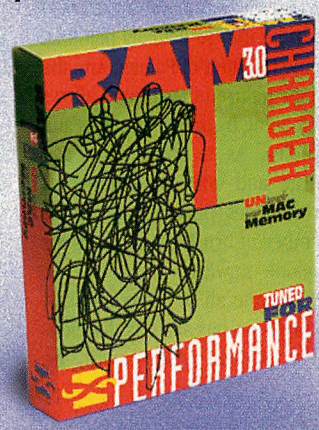
GOTTA HAVE IT

The Mac OS ought to work this way.

Until it does, there's

syncronys RAM 3.0 charger®

RAM Charger breaks down inefficient memory partitions to dynamically allocate memory where it's really needed. It's compatible with RAM doubling software, and pumps every System 7 Mac to run multiple RAM-hungry applications with more reliability.



Download a free demo from www.syncronys.com. Check it out... then get it from your dealer.

Or get it direct for just $39.95 at 1.888.777.5600.

syncronys softcorp

©1996 Syncronys Softcorp. All rights reserved. Syncronys, the Syncronys logo and RAM Charger, are trademarks of Syncronys Softcorp. All other trademarks are the property of their respective holders.

reviews

Fractal Design Expression

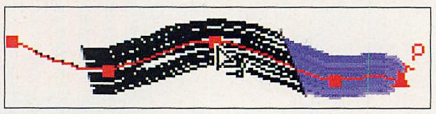
DEVELOPER: Fractal Design Corporation
CONTACT: 800-846-0111, http://www.fractal.com
PRICE: $199 (srp)
REQUIREMENTS: 68030, 12MB of RAM, pressure-sensitive tablet highly recommended



ANOTHER FINE ART MESS: Okay, it's not Realism, but still, the Path view (on left) and Wireframe (the black mess in the center) don't offer much insight into what you're image (on right) is or will look like.

Imagine if Painter were a vector-based instead of a pixel-based program. Fractal claims that's what Expression is: an infinitely scaleable Painter. To some degree they're right, but unfortunately, not enough.

Expression is a natural-media path-based drawing program. It simulates various natural media such as brushes, pens, and pencils, through an ingenious use of stroke styles and stroke transparency. Each stroke type is actually a path-based object, which can be manipulated in ways a collection of pixels can't. Using the Paintbrush tool, you apply a stroke style to the page; if you use a pressure-sensitive tablet, the stroke can increase and decrease in width as it is dragged, creating an effect that resembles a brush stroke. Using the Painter-esque color selection palette, any combination of colors can be applied to a stroke style. The result: A remarkable imitation of anything from a sketch to an oil painting.



THE GUTS OF IT ALL: The wide brush stroke is what you see with Expression's brushes; the red line and the points form the underlying path.

The resulting file can be transformed into a bitmap, or it can be saved in Illustrator 5 format for tweaking within your favorite illustration program (FreeHand or Illustrator, for example). In addition, you can save the Expression artwork as an EPS image that can be included in EPS-enabled programs, such as PageMaker and QuarkXPress.

The concept of painting with vectors is not new; both Illustrator and FreeHand have brush tools that vary in width when a pressure-sensitive tablet is used. But Expression's use of stroke styles provides a unique way for users to feel like they're actually painting, in the tradition of Painter. And the vector nature of each path allows for editing by dragging points and handles. As a bonus, you can create and edit any number of stroke styles, providing an infinite number of brush stroke types for any one drawing.

Despite all of these features, Expression has serious deficiencies. Mouse users will be frustrated to no end—a pressure-sensitive tablet is really the only way to take advantage of Expression's capabilities. The software ran slowly on a mid-range Power Mac with no progress bar when saving files. If you've used any stroke transparency, exporting to Illustrator turns your files into an uneditable (thousands of paths) nightmare.

Screen redraw is also poor—the Pen tool flickers as control handles were dragged out, and sections just disappeared when drawing at a high speed. No Hot Help appears for the myriad of tools, and the non-standard key commands add to the frustration (for example, there's no keyboard shortcut for turning the Zoom-in tool into the Zoom-out tool; you have to choose Zoom Out from the View menu). The path-only and wireframe views are next to useless; although they do save redraw time, they fail to show what you've drawn in any meaningful way.

That said, there is both immediate worth to this package and also quite a bit of potential. Expression creates brushstroke effects which are too cumbersome to make in Illustrator, and can be imported into Illustrator for use with other vector graphics. The potential for Expression to evolve into Painter-like status definitely exists (remember, the original Painter had no layers and fewer than a dozen tools), and should that potential be realized, Expression could be a major player in the graphics market.

Suggestion to Fractal: make this an Illustrator/FreeHand plug-in. Custom stroke styles could go a long way in either of these programs, and avoid all the interface problems. Of course, if Fractal doesn't make the Illustrator plug-in, maybe another developer will...
—*Ted Alspach*



GOOD NEWS: Stroke transparency and natural media simulation is an innovative approach in the vector world.
BAD NEWS: Slow. Requires a tablet for proficiency.

Vectors, Pixels and Other PICTs

Vectors Outlines. Graphics formed with vectors are shape-based. These shapes are filled and stroked with colors. Adobe Illustrator, Macromedia FreeHand, and CorelDraw are vector-based graphics programs.

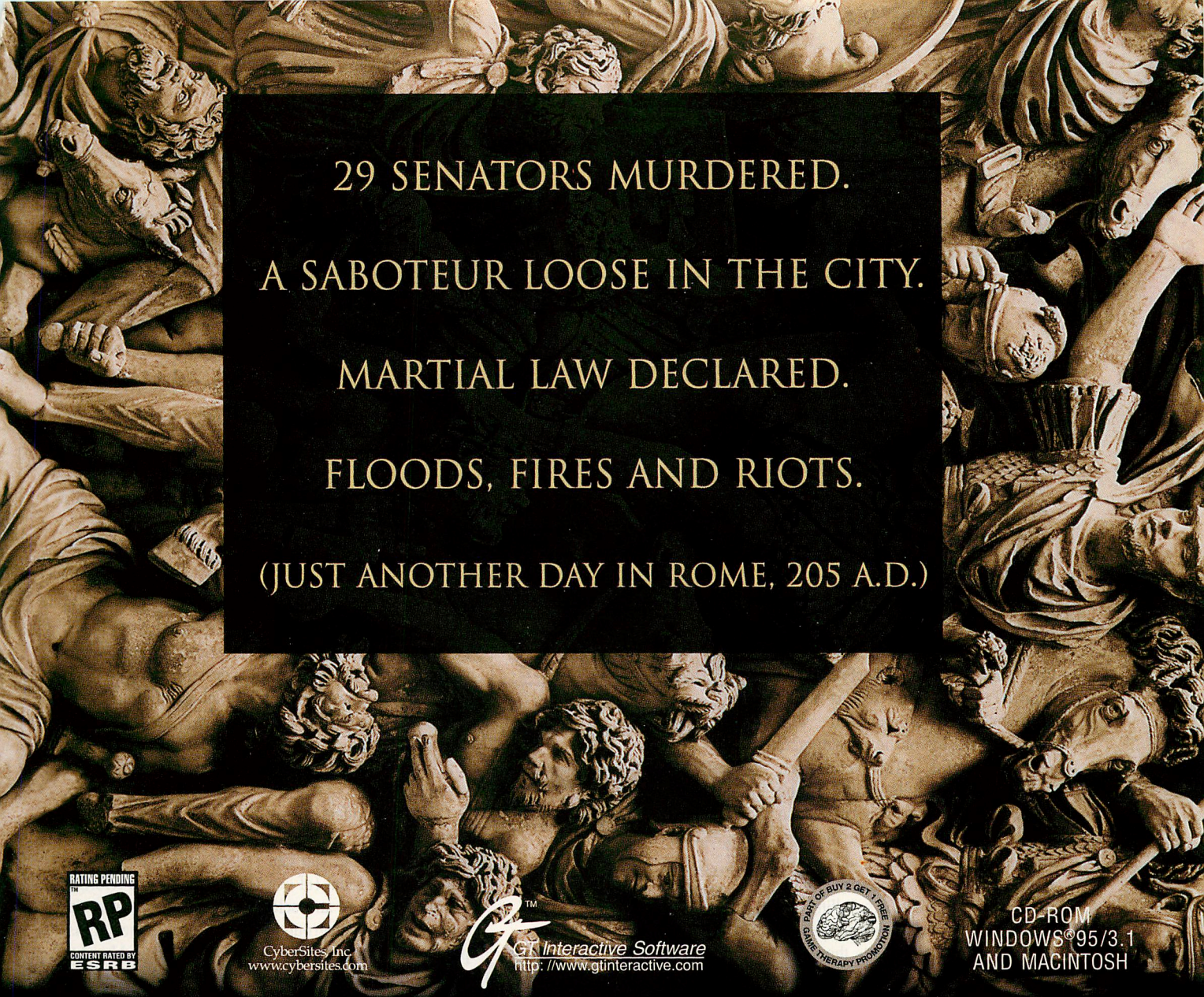
Pixels Little teeny-tiny colored squares that make up an image. Your Mac screen, for instance, has thousands of 'em. Photoshop is pixel-based.

Resolution How many dots or pixels per inch there are, measured horizontally by vertically.

dpi An abbreviation for Dots Per Inch. It's actually the number across one inch, not the total number of dots in a square inch.

EPS Encapsulated PostScript. A PostScript file that can be placed within another application document, usually with a preview (which, ironically, is PICT-based).

PICT Short for Picture. The on-screen standard file format for Macs. Not an abbreviation for Pixels In Constant Turmoil, though desktop publishers who have trouble printing the format from Quark believe it to be so.



Totally immersive and faster than the hit web game, SPQR takes you inside an historically accurate reconstruction of Imperial Rome. Only catch is, there's a plot afoot to destroy it. As a gifted inventor's apprentice, you must discover the true identity of the saboteur. You'll call upon your knowledge and skill to navigate a labyrinth of politics, murder and deceit. Succeed, and the Empire is saved. Fail, and it's turn out the lights. Don't feel pressured or anything, though.



S·P·Q·R

THE EMPIRE'S DARKEST HOUR

S.P.Q.R., S.P.Q.R. The Empire's Darkest Hour™ and CyberSites are trademarks of CyberSites, Inc. ©1996 CyberSites, Inc. All Rights Reserved. Created by CyberSites, Inc. Published and distributed by GT Interactive Software Corp. Windows® is a registered trademark of Microsoft Corporation. Macintosh® is a registered trademark of Apple Computer, Inc. All trademarks are property of their respective companies.

reviews

CyberPress

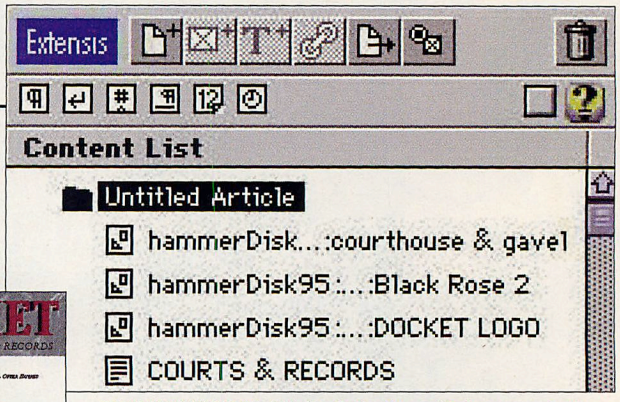
DEVELOPER: Extensis
CONTACT: 800-796-9798; http://www.extensis.com
PRICE: $149.95 (srp)
REQUIREMENTS: System 7.1.1 or later, QuarkXPress 3.32 or later, 16MB of RAM

Trying to put a square peg in a round hole usually ends in failure or worse. HTML simply was not designed for page layout, and designers who expect to post a meticulously made page to the Web are necessarily going to be disappointed. Yet it's so tempting—XPress can make such beautiful pages, and the Web shows pages... what is to be done?

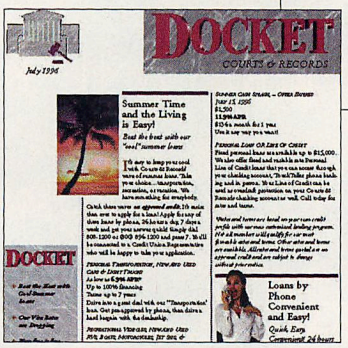
Extensis Corporation tries to save the day with CyberPress, a QuarkXPress-to-HTML export utility developed in cooperation with Astrobyte, creator of the considerably more powerful HTML converter, BeyondPress. Bundled with Adobe PageMill 2.0, CyberPress is intended to offer QuarkXPress users an inexpensive, easy way to convert (adapt, really) existing QuarkXPress content for the World Wide Web. By bundling this Xtension with the new version of PageMill, Extensis presents the entry-level Web publisher a means of extracting and converting the content in one environment and then fine-tuning it for ultimate publication on the Web in another.

The CyberPress XTension itself is simple and straightforward: It automatically generates a list of the document's contents (both text and picture boxes) as a list of icons in a floating Contents palette. This palette provides complete control of most of the program's functions, including setting preferences, and adding, deleting, or modifying elements. Elements can be dragged and dropped to rearrange, or pictures can anchored to text by dropping an icon on one to the other before exporting. There are also palette functions available, without leaving XPress, such as adding line or paragraph breaks, date and time stamps, adding hypertext links, and text-to-table conversions—all vital to Web authoring. Adding an element, such as text or an image, to the Contents palette is as easy as highlighting, and then clicking a button.

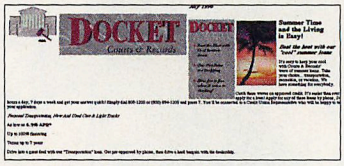
The list CyberPress generated for the newsletter document was complete and all of the elements, and the tools to modify them, were easy to access. When the converted document was viewed in a browser (Netscape or Internet Explorer), the original layout didn't magically appear in its original form or even in a form ready for the Web, but all of the elements were there: the Illustrator artwork, the photographs, and the text conversion maintained all of the original character formatting. It's not a one-step process, but instead a fast and easy way of, at the very least, preparing a good deal of the content for use on the Web.



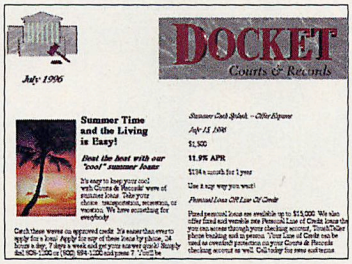
THIS IS WHERE IT ALL IS: CyberPress finds every single box, text, or picture XPress document, and clearly displays them all in the Content List.



THIS IS THE WAY THE PAGE GOES: Here we see the original page in XPress...



... and here it is after a first pass through CyberPress...



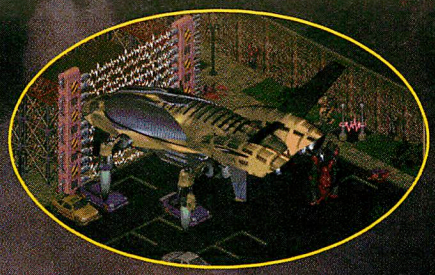
... and here it is after a bit of tweaking in PageMill 2.0. And it's all bundled! Such a bargain!

CyberPress offers a few Web-prep tweaks (without going to PageMill, that is) prior to HTML export. In the Preferences dialog, you can specify GIF or JPEG as the default image format (of course, you can always reformat individual images) and select headline sizes. Giving the picture boxes a background of "None" makes them transparent GIFs. From the Contents palette a text subhead in the document can be converted to an image (useful to preserve a typeface from the user's default browser font) by using the pull-down menu automatically linked to that element. Also, while you're adjusting the layout it is easy to move back and forth between QuarkXPress and the browser, and quickly view the results of your changes. This is where the user will begin to see the limitations of CyberPress opposed to the more powerful BeyondPress, and Extensis' reason for bundling it with AdobePageMill, which helps with defining tables, adding a background, and creating links.

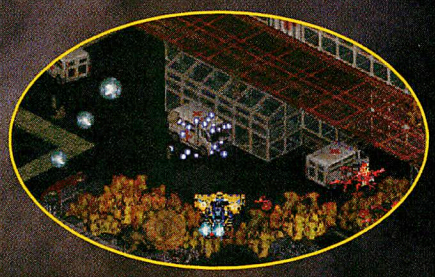
CyberPress' strengths are ease of use and minimal time investment. Coupled with all of the other functions that this small utility provides and the equally easy-to-use (and vastly improved) Adobe PageMill, it's a great deal for an entry-level Web publisher with a lot of QuarkXpress content that needs to be published. Even for an experienced HTML author who wants to save time repurposing existing QuarkXpress content, the CyberPress Xtension alone will prove a solid solution. *—Ralph Seymour*



GOOD NEWS: Lots of functions. Easy to use. You don't have to take out a loan to buy BeyondPress.
BAD NEWS: If you absolutely have to have it, the upgrade to BeyondPress is still $449.



You are here



... and here

TO SAVE MANKIND FROM IMMINENT DESTRUCTION,
WE DON'T EXPECT YOU TO BE IN TWO PLACES AT ONCE.

WE EXPECT YOU TO BE IN THREE.



... and here.

BEDLAM™

Download the demo at
http://www.gtinteractive.com

PC/MACINTOSH®

PlayStation™

™

MIRAGE™

GT INTERACTIVE SOFTWARE

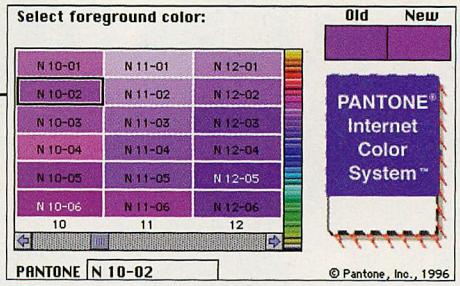
TEEN T AGES 13+ CONTENT RATED BY ESRB

Bedlam™ is licensed from Mirage Technologies (Multimedia) Ltd. © 1996 Mirage Technologies (Multimedia) Ltd. All Rights Reserved. Distributed by GT Interactive Software Corp. Mirage, Mirage Logo™ and Bedlam are trademarks of Mirage Technologies (Multimedia) Ltd. and used with permission. GT™ and the GT Logo™ are trademarks of GT Interactive Software Corp. Macintosh® is a registered trademark of Apple Computer, Inc. Sega Saturn™ Logo is a trademark of Sega Enterprises Ltd. PlayStation Logo™ is a trademark of Sony Computer Entertainment Inc. All other trademarks are the property of their respective companies.

reviews

Pantone ColorWeb

DEVELOPER: Pantone
CONTACT: 201-935-5500; http://www.pantone.com
PRICE: $29.95 (srp)
REQUIREMENTS: System 7.0 or later, 1MB of RAM, Apple's extensible color picker extension (included on the ColorWeb disk)



YOU CAN PICK YOUR FRIENDS: The ColorWeb picker can be used wherever the Apple color picker is available.

Hot Tip:

After experimenting with various colors in the picker, return to your original color or its closest approximation by clicking on the Old color swatch.

Your Web page graphics look terrific on your Mac but seem a tad sickly on an 8-bit monitor. Well, my friend, they're dithered. The 8-bit monitor has to approximate all but its measly 256 colors with this Georges Seurat-like technique. And it gets worse. The Mac shares only 216 colors with Windows; there, you're cheated out of 40 more colors. What's a creative Web designer to do?

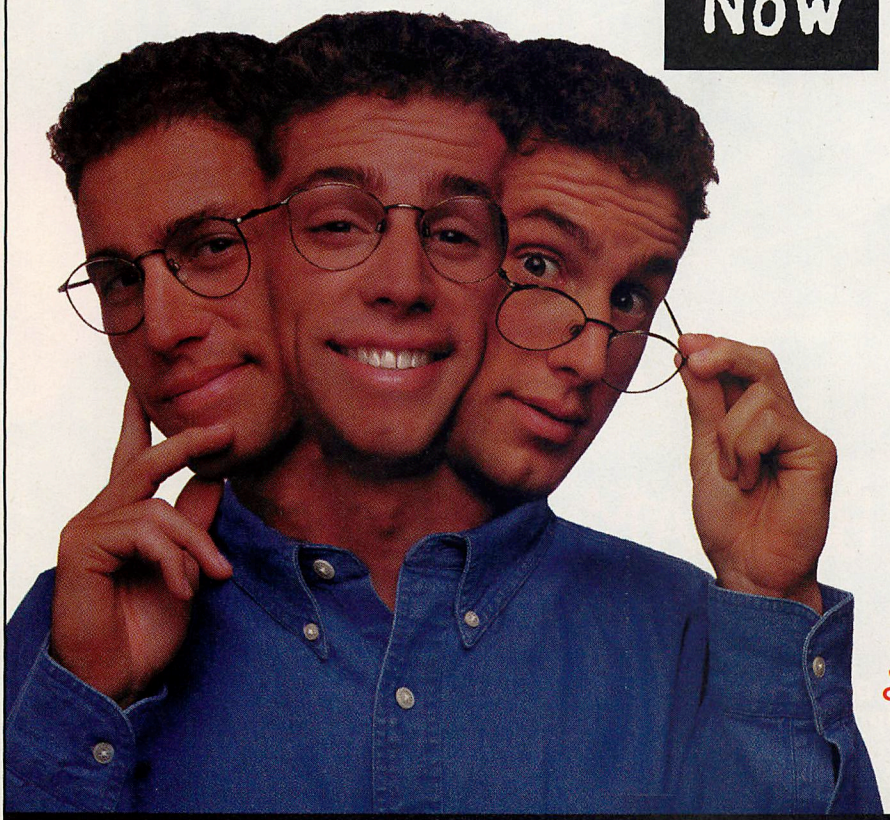
You can avoid dithering, as well as shifting colors to nearby approximations (no matter what the monitor or platform), by using just those safe 216 colors. A free, if limited, solution is the browser-safe, 216-color palette from Lynda Weinman (http://www.lynda. com/hex. html). Unfortunately, it works only in applications that let you import a custom palette, such as Adobe Photoshop. Advice for serious Web authors: get Pantone ColorWeb 1.0. It's a one-trick pony with a terrific trick.

Drop ColorWeb into your System Folder, and the color picker in nearly every application—Claris Home Page, Adobe PageMill, Photoshop—automatically includes the 216-color, Internet-safe palette. If you've already sampled a color in your application, ColorWeb offers the nearest approximation, dither-free. The package includes a printed fan-guide booklet of color swatches, which gives RGB, hexadecimal, and CMYK equivalents for each color.

We do wish the on-screen color picker displayed a bit more information, like the hex string (instead of having to go into the guide). And the sample Old and New swatches could be larger. It would also be slick if the system color picker's modal window would let us work while it was up. But now we're just nit-picking. ColorWeb is a tool whose time has come. —*Joseph O. Holmes*



GOOD NEWS: Extremely easy to use. Works as advertised. Gentle price.
BAD NEWS: Unmovable modal window.



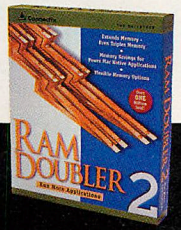
Now

Triple Your Memory And Forget Those Splitting Headaches.

Now it's easy to *triple* your memory with software and without the headache of tearing your Mac apart. New RAM Doubler™ 2 is the improved version of RAM Doubler, one of the highest-rated and best-selling Mac utilities ever with more than *one million* sold. RAM Doubler 2 is faster, offers flexible memory settings and keeps those memory hungry apps at bay. RAM Doubler 2 lets you run more programs at once, work faster and work smarter. Get the most out of your Mac with new RAM Doubler 2.

Connectix

1-800-571-7558 or www.connectix.com



Triple Your Memory With New RAM Doubler 2

© 1996 Connectix Corporation. 2655 Campus Drive, San Mateo, CA 94403 USA • (415) 571-5100 • Fax (415) 571-5195 • E-mail info@connectix.com
RAM Doubler is a trademark of Connectix Corp. All other trademarks are the property of their respective holders.

PopupFolder

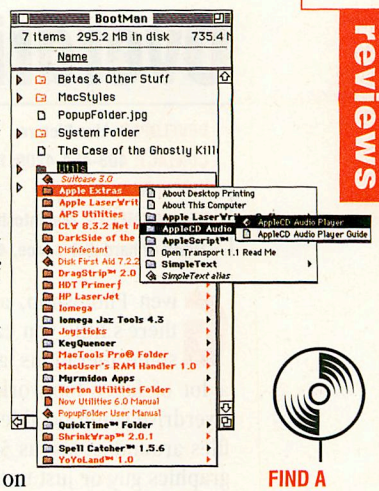
DEVELOPER: ASD Software
CONTACT: 909-624-2594; http://www.asdsoft.com
PRICE: $39.95 (street)
REQUIREMENTS: System 7.0 or later

POPUPFOLDER'S MAIN TRICK (or treat) is pop-up folders in the Finder. Just hold down the mouse button on a disk or folder icon.

PopupFolder is an inexpensive, useful utility that makes navigating folders and files—both in the Finder, and in Open and Save dialog boxes—faster, easier, and more convenient.

PopupFolder's main trick is, appropriately, to create pop-up folders in the Finder. Press and hold the mouse button on any disk or folder and up comes a hierarchical submenu of its contents. While still holding the mouse button down, slide the cursor onto any folder and a hierarchical submenu of its contents appears. In other words, you can view the entire contents of a disk or folder just by holding the mouse button down. This lets you navigate up to 16 levels deep without ever opening a single folder. There's also a Grab key that lets you move files or folders without ever opening their parent folders.

But wait, there's more: PopupFolder also spruces up Open and Save dialog boxes in several ways. It adds pop-up menus just as in the Finder, adds a special menu bar with your frequently used folders, enlarges the dialog boxes (reducing scrolling), adds a handy hierarchical title menu, and allows you to see custom icons. Other options include a hierarchical Apple menu (alas, not much better than the one included with System 7.5, though it does let you choose your font), a perpetual PopupFolder icon in the menu bar for fast access to frequently used folders and files, and two types of "sticky menus."



Comparisons to Now Software's Now Utilities are unavoidable. Now Utilities does almost everything PopupFolder does—some things better, others worse—and a whole lot more. But Now Utilities also costs more than twice as much. If you're on a tight budget, or don't need the other features Now offers, PopupFolder is a solid and inexpensive utility that saves you time and trouble every day. —*Bob LeVitus*

FIND A DEMO of PopupFolder on The Disc.



GOOD NEWS: Works as promised. Easy to use and get used to. Inexpensive. Prompt tech support via e-mail.
BAD NEWS: Now Menus and Now SuperBoomerang are better implemented though more expensive.

Now You Can Answer Your Mother's Prayer.

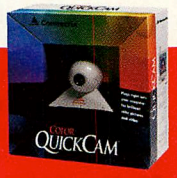
Appear Nightly In Her Living Room In Living Color.



Introducing Connectix Color QuickCam™, the camera and software that lets you use your computer in fun ways at home, business and on the net. Send personalized cards. Add images to business reports. Videoconference with additional software. Spiff up your web site. Get Color QuickCam for under $200*. Just plug it in, install the software and start taking brilliant color pictures and video on your computer.

Connectix

1-800-571-7558 or www.connectix.com
*Estimated retail price after $30 rebate



Now You Can With Color QuickCam

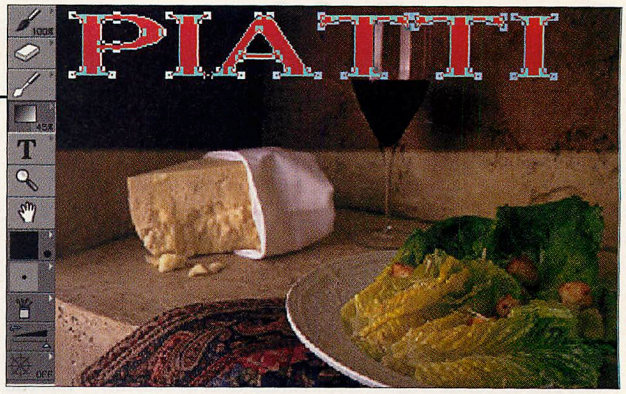
For Windows and Mac platforms. Available wherever computer products are sold.

© 1996 Connectix Corporation. 2655 Campus Drive, San Mateo, CA 94403 USA • 415-571-5100 • FAX: 415-571-5195 • EMAIL: info@connectix.com. QuickCam is a trademark of Connectix Corporation. All other trademarks are the property of their respective holders.

reviews

Overdrive

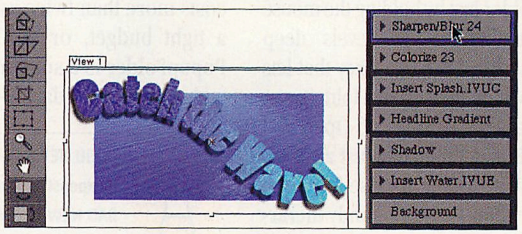
DEVELOPER: Live Picture
CONTACT: 408-464-4200; http://www.livepicture.com
PRICE: $149.95 (srp)
REQUIREMENTS: Macintosh Quadra or Power Macintosh, 18MB of free RAM, 10MB of hard disk space, 4MB of VRAM, CD-ROM drive



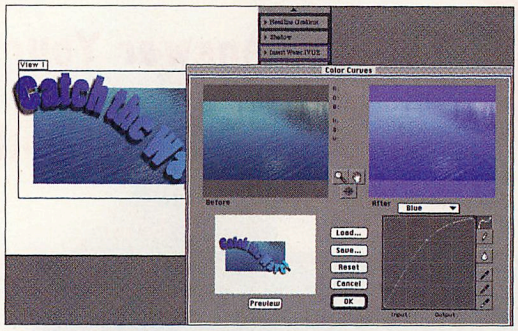
GRADIENTS, PATHS, AND FETA: You can layer into Overdrive elements that you can't in Photoshop, such as path-based text.

Given Photoshop, a fast enough Mac, and plenty of RAM, there's little you can't do with (to, on) an image. Granted, some alterations take longer than others, and some require a lot of fancy footwork. So, when Live Picture says that with Overdrive you'll be able to do a few new things, and push 50MB files around as fast as 5MB files, are they talking to the average graphics guy or just to the elite?

The answer is: to both. The value of real-time image processing regardless of file size and number of layers won't be lost on anyone who uses Photoshop. With Overdrive, Live Picture delivers its Functional Interpolating Transfer System (FITS) technology, found in its more feature-filled and expensive Live Picture, to a package that is comprehensive and very affordable. What FITS does, essentially, is keep in mind the mathematical algorithms of the filters and transforms you've applied to the image; your workspace is basically a big preview window. Only when you output the finished product does Overdrive apply everything you've done. The strength here is that you now have a complete Undo list of every move you've made. Just think: that useless Gaussian Blur you did, six steps ago? It's gone, without tossing all the work you've done since then. Also, there's the speed bonus—since you're not really working on 50MB files, but smaller representations of them.



CAN I TAKE THAT BACK? Overdrive is forgiving of old errors. All of the functions listed along the right of the workspace are individually undo-able, no matter what's come after.



DOWN BY THE RIVER: Overdrive's handling of color is at once simpler and more powerful than that of many applications.

The most appealing feature of Overdrive is its excellent integration with Photoshop. Those who are happy with what they already have or who just don't want to learn new tricks should note that they won't have to give up one for the other. Extensive file format and plug-in support makes image acquisition and export between applications simple. For example: importing a Photoshop file containing an alpha channel and converting it to Live Picture's IVUE format is quick and painless. As for the learning curve, if you already understand layered editing in Photoshop, Overdrive is no mystery at all.

But enough about that other program. Overdrive has its own special abilities that make it a formidable application in its own right and not least which is its ease of use. Overdrive has only four operational modes: insertion, positioning, creation, and view. Tools, tool controls, a control bar, and a layer stack are presented in a clear and straightforward fashion in the Overdrive workspace. The compositing tools work well and fast, and editing, retrieving and reusing paths, adjusting edges and creating drop shadows from the retrieved paths, are all simple and effective. The multiple previews feature is particularly handy. Finding your way around is easy—and ease equals productivity.

Overdrive reduces processing to a single, cumulative step. Again, it's a simple procedure to build your file for output. Since a FITS file is resolution-independent, it can be used to output a file at any level of resolution. You're constrained only by the resolution of the images that are used. Overdrive also lets you use batch processing to build files—a great relief if you're building multiple output files at different resolutions.

The bottom line is, Overdrive is a very robust application for the price. For the cost of a few plug-in filters, you gain control over alpha channels and edge options, importing and exporting both paths and alpha channels, monocolor layers, multicolor layers, colorizing layers, sharpening/bluring layers, extensive file format support and plug-ins, scalability, and the use of IVUE correction. The flexibility that Overdrive's technology affords you, such as selective undos and reusable files, could certainly help when it comes to making last-minute changes to an image. If you want the real-time editing and compositing of large files that Live Picture provides, but don't need the more sophisticated color correction, separation, or masking controls found in Live Picture, then Overdrive will be welcome on your hard drive. *—Ralph Seymour*



GOOD NEWS: A lot of Live Picture's good stuff. High performance real-time compositing for the masses.
BAD NEWS: The manual is on the slim side. Serious hardware requirements.

BECOME A PART OF HISTORY!

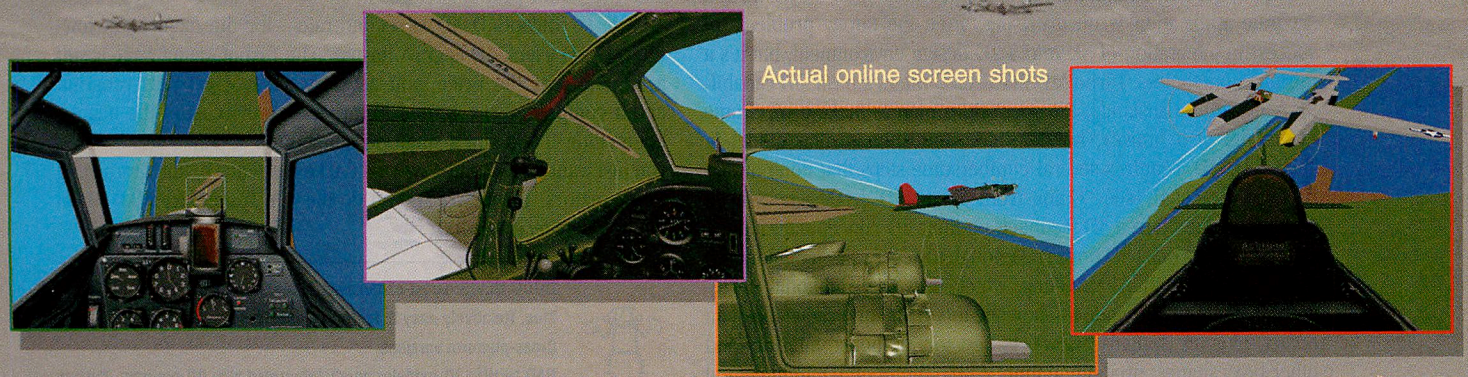
WarBirds™ SM

Join the Next Revolution in Multiplayer Gaming on the Internet.

Visit our Website and download WarBirds for *free!*
http://www.icigames.com

***Free* 5 hour online trial period for new players!**

Why wait for others? You can play WarBirds right now on the Internet! Compete against hundreds of other players simultaneously from all over the world! All in Real Time. 24 hours a day. 7 days a week!



Actual online screen shots

System Requirements: Any PowerPC Macintosh with 16 Mbyte RAM (or more) running System 7.5 and Sound Manager 3.1 (or later). 9600 baud Modem and Internet access (supports serial connection or TCP/IP using optional third party tools). Joystick recommended.

Interactive Creations Incorporated - 1701 West Northwest Hwy, Suite 220, Grapevine TX 76051, Voice (817) 424-5638 / FAX (817) 251-2228

reviews

TurboCAD 2D/3D

DEVELOPER: IMSI
CONTACT: 415-257-3000; http://www.imsisoft.com
PRICE: $149.95 (srp)
REQUIREMENTS: Mac II or later or Power Mac; 4MB of RAM; 12MB of hard disk space; System 7. (recommended: Power Mac, 16MB of RAM, large screen monitor, plotter, or other large-format color printer)

If you are in the architectural, mechanical, electronic, technical illustration, or product design fields (or even planning to enter them as a student), you already know you need CAD (computer-aided design) capability to speed your work. But Mac CAD software ranges from under $200 to well over $4,000, and there's not much software in the midrange, so it's hard to know where to start.

For $149, you can't go wrong with IMSI's TurboCAD, the least expensive true CAD software for the Mac. This is a full-featured program for serious drafting, with the numerical precision and wealth of drawing tools that CAD users require.

TurboCAD 2D/3D is actually two separate apps, one for 2D drafting and one for 3D. Of the two, TurboCAD 2D is the stronger program, and more easily mastered. It offers the CAD basics, such as line, curve, shape, and arrow drawing tools, drawing layers, snap-to-point cursors, precise shape positioning, and resolution-independent zooming and output. Version 3.0 offers redesigned floating tool palettes and a new tool bar; automatic dimensioning; menu-assignable macros for automating repetitive tasks; a new coordinates palette to enter absolute, relative, polar or 3-D coordinates for any shape; and one-step wall joining—a feature floor plan designers will love.

The extensive, drag and drop symbol library contains references for most common CAD tasks, including: electrical and electronic systems, residential and office buildings, computer networks, flowcharts, HVAC (heating, ventilating, air conditioning), landscaping, and mechanical parts (American and metric). For the mixed platform shop, TurboCAD is available in a Windows version, too.

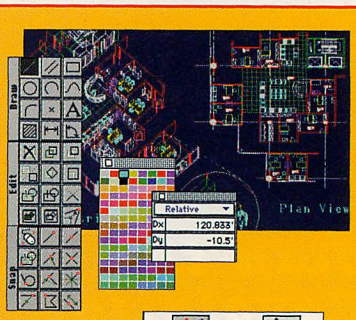
TurboCAD doesn't deliver everything. Conspicuously lacking is an integrated relational database, which is standard in most other CAD programs. The ability to assign serial numbers and other information to a shape and store that data in a database is essential for generating material bills or parts lists directly from drawings.

TurboCAD 3D is not nearly as useful. Providing 3D modeling in a separate application is unsurprising, given the knotty problems of successful integration of 3D into a 2D design environment, but it's a mistake nonetheless. TurboCAD 2D already offers a basic 3D capability (you can, for instance, extrude a floor plan to make a wireframe 3D model of a house), but to shade and animate that model in TurboCAD 3D, requires several cumbersome steps that don't always work as expected [see "Going from 2D to 3D"]. Designers need immediate, hassle-free 3D feedback on their 2D conceptualizations.

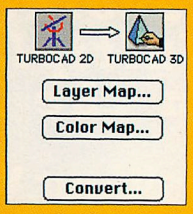
Nor is TurboCAD 3D powerful enough to serve as a standalone 3D design/animation tool. Modeling, which uses the traditional orthographic projection (windows show the top, front, and right side of an object, plus an isometric view), is best for 3D house interiors and other boxy shapes; predefined tools and a library of 3D architectural parts help you create standard elements such as roofs, stairs, kitchens, bathrooms, and so on. But complexly curved shapes are beyond the program's capacity. Finally, TurboCAD 3D does not support QuickDraw 3D hardware acceleration or the 3DMF file format. If serious 3D design is what you're really after, you'd be much better off with a dedicated 3D animation app that offers CAD precision, such as Virtus Walkthrough Pro for architectural work or Macromedia Extreme 3D for product design.

OK, so TurboCAD 3D is second-rate—for the majority of low-budget CAD users, 3D is gravy anyway. The TurboCAD package is still a bargain. For the price, you get a sweet little 2D CAD program and a comprehensive symbol library at half the cost of the nearest competitor. If you run a small design shop or architectural firm, or you just want to get some low-cost CAD experience before graduating to the majors, TurboCAD 2D can do the job. Leave TurboCAD 3D in the box. —*Steve Anzovin*

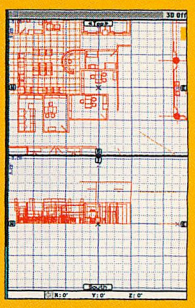
GOING FROM 2D TO 3D



TurboCAD 2D has a full range of tools for making complex, professional drawings. Turning those drawings into a 3D model isn't easy or especially rewarding, however.

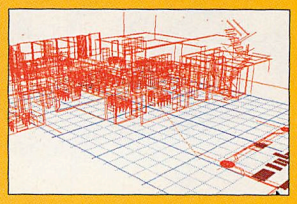


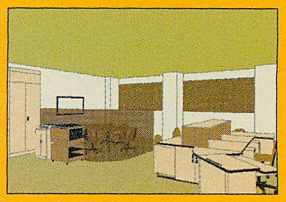
1. First, save your 2D drawing, launch the TURBOCAD 2D/3D Converter program, and convert the file to TurboCAD 3D's proprietary .prs format. Wondering about how to use the Layer and Color mapping buttons? Sorry, they're not documented anywhere.



2. Open your drawing in TurboCAD 3D. It will come in as a wireframe with much of the color information lost. Work in the tri-view windows to assign colors and surface attributes to every object in the scene and to adjust your viewpoint, rotation, and scale.

3. After all that, what you get is just flat shading anyway. Shown is a sample rendered drawing from the TurboCAD tutorial.







GOOD NEWS: Least-expensive full-featured CAD program for the Mac. Relatively easy to learn and use. Has a 5,000-symbol library. Cross-platform versions.
BAD NEWS: 3D-modeler poorly integrated with 2D-program. Subpar documentation of new features.

7.9 billion miles of open highway and you've got TotalAccess.™



$19.95 flat rate.* Unlimited Internet mileage.

EarthLink Network®

The coolest, easiest Internet access on Earth.

Every account includes email and a free 2 meg Web site.
Call now for your EarthLink Network TotalAccess™
software with Netscape Navigator™ 2.0.

1-800-395-8425

1995 BYTE POURNELLE'S USER'S CHOICE AWARD

Internet access in over 290 cities in the U.S. and Canada. Software for MACINTOSH, WINDOWS, WINDOWS 95, featuring Netscape Navigator 2.0. EarthLink Network is one of the largest Web space providers in the U.S. and also provides ISDN, Frame Relay, T1 and other Internet services. **There is a one-time set-up fee of $25.00. Prices for Canada are different.*

NETSCAPE NAVIGATOR™ INCLUDED

EarthLink Network, Inc. 3100 New York Drive, Pasadena, CA 91107 Fax: 818-296-2470
Info via email: info@earthlink.net Live human via email: sales@earthlink.net Visit our Web site at http://www.earthlink.net

Copyright ©1996 EarthLink Network, Inc. All Rights Reserved. Trademarks are property of their respective owners. Netscape Communications, Netscape Navigator and the Netscape Communications logo are trademarks of Netscape Communications Corporation. ©1996 PhotoDisc.

reviews

Image Alchemy PS

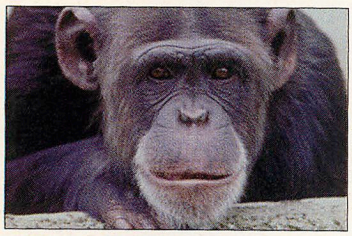
DEVELOPER: Handmade Software, Inc.
CONTACT: 510-252-0101; http://www.handmadesw.com
PRICE: $495 (srp)
REQUIREMENTS: 68K or PowerPC, 4MB of RAM, System 7.0 or later, AppleScript (for scripted operation)



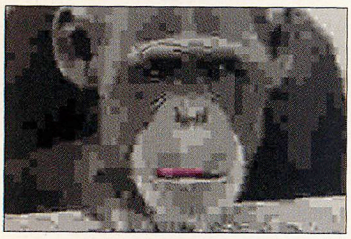
IN YOUR EYES: Saving a nice photo as a JPEG, there is little quality difference between Image Alchemy's 66K conversion (left), Graphic Converter's 121K file (center), and DeBabelizer's 176K file (right).

FIND THE DEMO of Image Alchemy PS on The Disc.

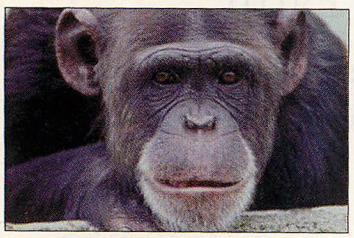
It's encouraging that Handmade Software has ported their formidable image conversion program from the UNIX platform to our land of Macintosh. Image Alchemy's purpose in life is to help you convert and compress graphic images across formats and platforms. And it is impressive how capable this program is: The platforms supported include not only Mac, OS/2, DOS, and all Windows types, but all UNIX flavors (from Linux to Solaris), and over 75 image formats. Also, Image Alchemy provides some basic image-editing features, such as gamma correction, scaling, and flipping/mirroring. If you find that a CD-ROM or Web page seems murky when it is viewed on a Wintel box, this program could solve your problems. However, except for those Mac users who must deal with very exotic graphics not covered by other available applications, this program might prove to be too expensive and feature-shy.



SPOT THE MONKEY: The original PostScript image is above.



AN OVER-COMPRESSED file can ruin a picture.



BUT IMAGE ALCHEMY guides you to the best compromise of file size and looks.

Image Alchemy goes *mano a mano* with Equilibrium's DeBabelizer (currently the program standard for most graphics and multimedia professionals). How does it fare? Well, both good and bad.

In preparation for printing or multimedia it is often necessary to dither an image (reducing true color to a specific palette, or to black-and-white, for example) and Image Alchemy comes through with seven different dithering algorithms from which to choose (including stochastic, one of the most commonly used), each with their respective strengths (explained thoroughly in the documentation). Image Alchemy also provides more options in the image conversion process than DeBabelizer: For example, Adobe's Acrobat PDF format is supported and PostScript Level 1 and 2 files can be opened and manipulated and then output to various PostScript devices. In addition, the standard 35 Bitstream Postscript fonts are included with Image Alchemy, to ensure uniform type from production to printing.

Image Alchemy is a boon to Web content producers. Although it creates the smallest JPEG image we've yet seen from any program (at a great loss of image quality), Image Alchemy also creates the smallest high-quality JPEGs and dramatically speeds Web page delivery (see "Spot the Monkey"). Image Alchemy can also export images in all the GIF format options, including Interleaved (Interlaced), and Transparent (choosing the transparent color is a snap, to boot).

The image editing capabilities of Image Alchemy and DeBabelizer are nearly equal, but only the latter supports QuickTime palettes and is geared toward animation concerns. Although its interface can be kindly described as inscrutable (and more honestly, totally baffling), DeBabelizer is still, once mastered, a more powerful program than Image Alchemy for graphic production, giving the user two levels of functionality (simple and expert) and scriptable operation or batch processing (automation). Image Alchemy also provides scripting support via Applescript but with DeBabelizer, these scripts are easily named and stored internally, and so are always available. Image Alchemy requires that scripts be stored in a folder external to the program. And more importantly, DeBabelizer gives you more control where you want it: you can approve each graphic individually during a batch process or let the program run automatically. And you can exit the batch processing parameter-setting window (the baffling one) at any time and still keep the settings for next time. With Image Alchemy, you quit the process, and all your settings are lost. Also unlike DeBabelizer, Image Alchemy does not ship with a built-in database of palettes—so to reduce and convert the colors of a graphic to the Windows System Palette, for example, the graphic must already be in that format in order to serve as the source palette.

No doubt, this is a heavy-duty, high-quality program. For the average Web person, putting up a page or two here and there, Image Alchemy is definitely overkill. A better choice would be the shareware program Graphic Converter (available on The Disc), which, though it can't handle dithering and file formats such as Lumena CEL or AVHRR, runs less than a tenth of Image Alchemy's price.

Still, Image Alchemy's manual describes in detail each of the more than 75 supported file formats and their variations, and Handmade Software guarantees that if Image Alchemy PS fails to open a graphic file, any graphic file, they'll personally do it for you! Though that's reassuring, it's an offer you'll probably never need to accept. —*Richard d'Andrea*

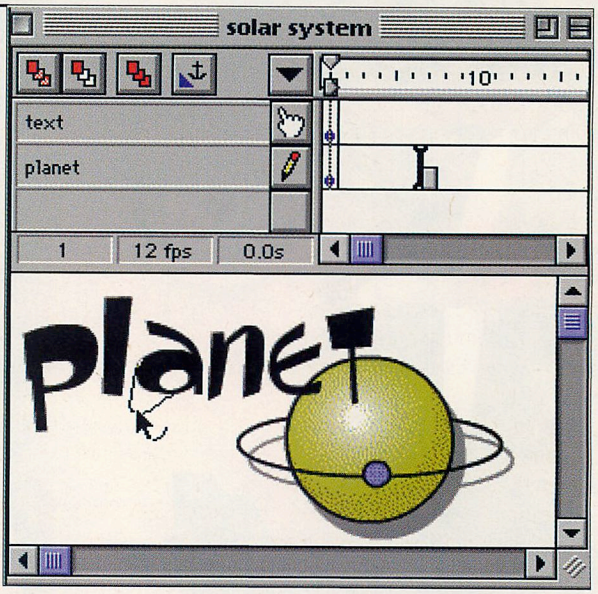
GOOD NEWS: Can convert from and to almost any graphic format in the known universe. Includes Postscript and Acrobat PDF support.
BAD NEWS: Much of this capability can be had cheaper.


Visit our Web site!
http://www.chproducts.com/
Game Gear for Macintosh™
Sure, there are cheaper Macintosh and PC game controllers. But if you're ready to get serious, you need the high-quality, built-to-play-rough peripherals from CH Products.
When you're ready to get serious, you're ready.
Our joysticks, throttles, flight yokes, rudder pedals, and other controllers are born in the USA, and made to take the heat of any battle, race or game you throw their way. So put on your game face, get down to your computer dealer and grab the game controllers made for serious players.
FlightStick Pro
F-16 FighterStick
Pro Pedals
Pro Throttle
Trackball Pro
CH Pedals
CH GamePad
Virtual Pilot Pro
Jetstick
CH PRODUCTS
CH PRODUCTS 970 Park Center Drive • Vista, CA 92083 • Phone 619 598 2518 • Fax 619 598 2524
http://www.chproducts.com/ • America OnLine: Keyword: CH Products • CompuServe: Go GAMEDPUB

reviews

FutureSplash Animator

DEVELOPER: FutureWave Software, Inc.
CONTACT: 619-552-7680; http://www.futurewave.com
PRICE: $249.95 (srp)
REQUIREMENTS FOR ANIMATOR: 68030 or better (68040 recommended), 8MB of RAM (16MB recommended), 5MB of hard disk space, System 7.1, mouse, graphics tablet, or compatible pointing device



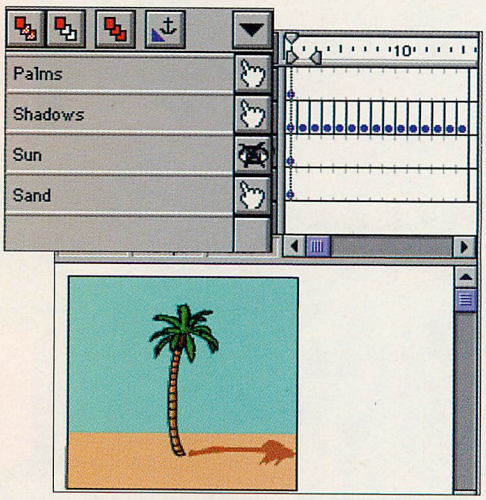
LOOK MA, NO HANDLES! With the magic of FutureSplash, all you need to do to alter a filled-path image is to click on an edge, drag, and the redraw and fill are automatic.

If terms like Bezier, directional lines, and paths make you break out in a rash, this could be the product for you. FutureSplash Animator is a 2D graphics and animation product that helps you create vector-based interfaces and illustrations for Web pages without those awful production tools. But like most things that seem too good to be true, FutureSplash Animator also has a little hitch. This hitch can be summed up in a single hyphenated word: plug-in.

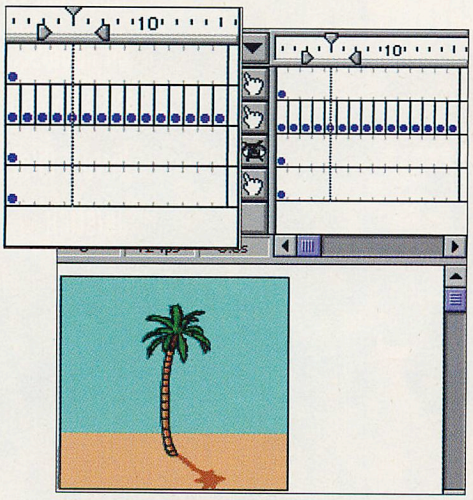
FIND A DEMO of FutureSplash Animator on The Disc.

The FutureSplash Player—aka FutureSplash plug-in—is required on the end user's machine to be able to view FutureSplash files. (It is currently available as a Netscape plug-in at FutureWave's Web site and will be a Microsoft ActiveX control for Mac when Internet Explorer 3.0 is released.) If visitors to your site don't have the plug-in, all they see is the nasty little broken plug-in icon—an anathema for Web designers. But all hope is not lost: the creators of FutureSplash realized that very few developers are willing to create graphics in a proprietary (and still obscure) format, so the program allows animated file exportation in a variety of formats including animated GIFs, QuickTime, and DXF. Still, for the best file compression and performance, you have to export to the FutureSplash (.spl extension) file format.

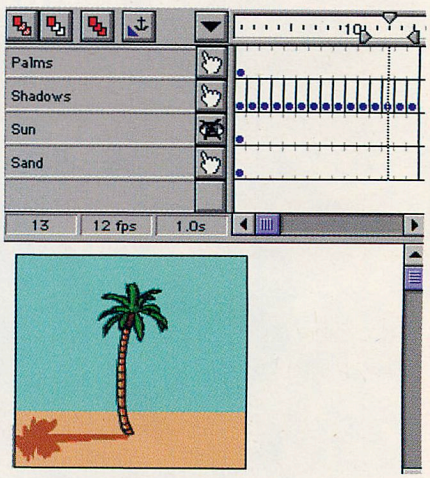
To understand exactly why an easy-to-use, vector-based tool is exciting, you need to understand a bit about the premise behind vector-based compression. Vector-based graphics are created by defining a number of attributes between two points. Objects and images are created by connecting lines from point to point and filling in closed areas. If you've ever seen wireframe 3-D model, you've seen a vector-based graphic. One advantage of this scheme is that you can actually zoom in on a graphic and it remains clean and unjagged (perfect for maps on the Web). On the flip side, there are programs, such as Adobe Photoshop, that are built on bitmap graphic technology—building images pixel by pixel.



a. Set elements of the animation into layers (à la Photoshop), to apply effects or moves to parts of your graphic, and turn layers on and off to simplify viewing.



b. The slider controls (as in Director) allow you to assign movement to elements on a frame-by-frame basis, and then view individual frames.



c. And then, as you play your animation, watch the sun roll by...

Vector-based graphics are exponentially smaller in terms of file size, and thereby much more efficient to use on the Web. After saving an animation into two different formats the GIF sequence weighed in at a hefty 79K, whereas the same animation saved as a FutureSplash file was lean and mean at under 20K.

FutureSplash's magic may sound familiar to those who know and love Macromedia Director (Shockwave), but there are a few key differences. FutureSplash does not support sound, Shockwave does. FutureSplash files start playing during download, while Shockwave files have to be downloaded entirely before viewing. FutureSplash animation and interactivity does not require scripting, advanced Shockwave files require knowledge of Lingo (Director's scripting language).

The procedure for uploading FutureSplash (.spl) files can be a bit daunting. First you must download and install the FutureSplash Player from <http://www.futurewave.com>. You must then contact your system administrator to have the Website server configured for FutureSplash. Though Shockwave also requires server configuration, its widespread acceptance may make it easier to convince your ISP to go that extra foot and a half. Just something to keep in mind if you're not running your site off your own server.

As an actual production tool, FutureSplash Animator makes creating vector-based images and illustrations fairly simple, especially when compared to the current generation of vector applications, such as Illustrator. In FutureSplash Animator you simply click and drag on an object's outline to change its shape. This gives you much more natural control over your creations.

Importing, editing, and animating from your favorite drawing programs is cake: FutureSplash supports Adobe Illustrator, PICT, AutoCad DXF, JPEG, and GIF file formats. Animation sequences that are created as sequences of GIF, EPS 3.0, Adobe Illustrator, DXF, JPEG, PICT, GIF, or QuickTime movie files are also welcome. If all else fails, and you can't find a single artistic bone in your body, pre-designed interactive buttons and animated clip art are also included.

FutureSplash provides terrific documentation and tutorials. Detailed interactive lessons walk users through a broad spectrum of FutureSplash production tactics. Drawing, animation, motion interpolation, button creation, and HTML basics are just a few of the areas that are covered.

On the horizon is a version of FutureSplash Player written completely in Java. Sound support will be implemented to enable synchronization of MIDI and digitized sound with FutureSplash Player animations, and increased browser support is on its way.

Overall, FutureSplash Animator is a solid Web production tool optimized for illustrators and animators, especially those uncomfortable with some of the more arcane vector tools. Just keep in mind: if your end user doesn't have the right plug-in, all those curves will take longer to display—and not all of us consider patience a virtue. *—Heidi Swanson*



GOOD NEWS: No more complex Bezier handles. Drag and drop curves and outlines.
BAD NEWS: Must use plug-in to get full benefit of FutureWave file compression.

A Powerful Choice!



power key

Turns Macintosh and monitor off or on
- manually.

or



POWERKEY PRO

Turns Macintosh, monitor, and peripherals off or on
- manually, or
- at a chosen time, or
- remotely by telephone, or
- when your system is idle, or
- when your Mac has crashed, or
- when you want to receive a fax, or
- to run a backup program at night, or

much, much, more. Call now and ask us how!

SOPHISTICATED CIRCUITS INC.

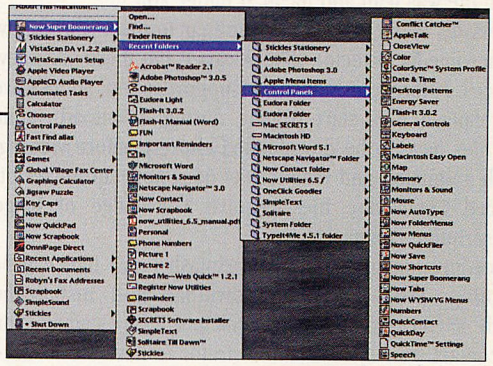
©1996 Sophisticated Circuits, Inc. PowerKey is a registered trademark of Sophisticated Circuits, Inc. Macintosh and the Apple logo are registered trademarks of Apple Computer, Inc.

800-769-3773
www.sophisticated.com
info@sophisticated.com
Fax 206-485-7172

reviews

Now Utilities 6.5

DEVELOPER: Now Software
CONTACT: 503-274-2800; http://www.nowsoft.com
PRICE: $89.95 (street)
REQUIREMENTS: System 7.1 or later, 8MB of RAM



WHERE DO YOU WANT TO HAVE BEEN TODAY? Though it beats opening multiple folders, Now Menus can get a bit overwhelming quickly.

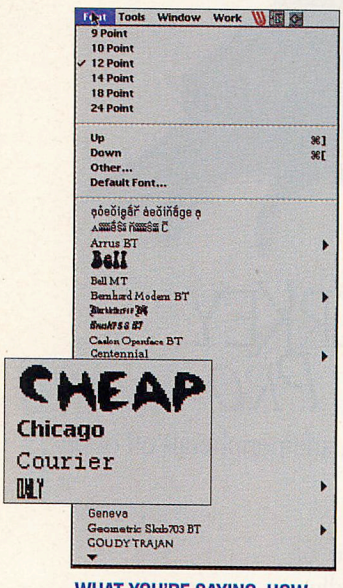
FIND A DEMO of Now Utilities on The Disc.

Now Utilities is almost legendary in the Macintosh world. In the ultimate in flattery, Apple has integrated several of its innovative functions into its own OS and plans to take others, such as Now Tabs, into its elusive Copland update.

But how does the average Mac enthusiast, who purchased the Macintosh for its elegant simplicity, approach this overwhelming collection?

Be skeptical of the hype. Despite the plethora of new and improved features and options in version 6.5, the most helpful items are also the easiest to use. Now Super Boomerang's main component hangs out in the Apple Menu, listing just about everything you've worked on recently, be they files, folders, or related items from a recent folder. Moreover, it offers pull-down menus from within the Save and Open dialog boxes, speeding that task exponentially. It also provides other options, such as the ability to create hot keys for a given file, but it wins best item in this collection precisely because its major functions are so wonderfully obvious.

Runners-up in this collection include Now Scrapbook and Now WYSIWYG Menus. Unlike Apple's own scrapbook, Now Scrapbook lets you organize your material much in the way you might make font sets. It's especially useful for anyone involved in multiple multimedia projects since it allows you to include every sort of media, including QuickTime movies, in a given set. WYSIWYG Menus shows how each font really looks within an application's font menu, utilizing hierarchical submenus to organize families. Within its control panel, WYSIWYG also enables you to see the complete lettering of a given set—even if the font is Post Script. And finally, it allows you to make font sets for different applications, a process that can be arcane from within the program itself (yes, we might be talking Photoshop here).



WHAT YOU'RE SAYING, HOW YOU SAY IT: This is a real nice thing to see if you work with multiple fonts. Sure beats referring to the Font Book.

The above control panels in themselves may be worth the $90 price, especially when combined with Now FolderMenus, which allows you to see hierarchical menus within a folder just by holding the mouse on the folder icon (in just the way the shareware program PopupFolder does) and Now Menus, an utility which allows you to organize custom menus from the Apple Menu and along the top of your desktop. Now FolderMenus can be excruciatingly slow but it's useful, and while Now Menus urges you to customize your computer into oblivion, some people find it a decent substitute for Marathon.

Unfortunately, too many of these utilities are either unnecessary or have been better duplicated by competing applications. While NowSave recalls in SimpleText form all of your keystrokes before a crash, the data is rarely left in useful form, and its actual save function only helps the rare soul who doesn't have Command-S etched into memory. Apple's "Find File" command (System 7.5 and later) makes Now QuickFiler irrelevant. Now ShortCuts works adequately, but both OneClick and QuicKeys are infinitely superior at creating macros. And the shareware program TypeIt4Me (available on MacAddict's first Super Phat Disc) is both easier to use and more reliable than Now AutoType, which tends to act like HAL in "2001" if you don't do everything exactly to its specifications.

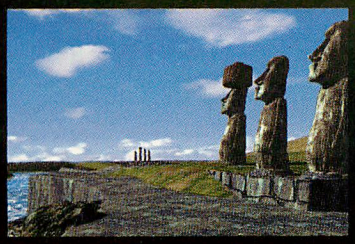
Finally, Now Startup Manager 7.0 (make sure to download the 7.0.1 revision, available at Now's Web site), which was available free last summer as a stand-alone application, does not yet compete on Conflict Catcher. It resembles ConflictCatcher. It suggests extension links, its one improvement over Conflict Catcher. However, it fails to mimic Conflict Catcher's simplicity. You can't scroll the info boxes as in Conflict Catcher, and it doesn't offer a "Close and Restart" option in its application menu. It doesn't even offer a custom menu in the menu bar, which would offer the ability to edit a given set in the way Conflict Catcher does.

Finally, Startup Manager is has a few personality problems. It caused one Power Mac to crash every time at shutdown, which could dent productivity. This problem came up occasionally on other machines, too. Moreover, when the application was uninstalled, it moved several basic extensions (such as Desktop Printer Monitor) into the "Extensions (Disabled)" Folder, in a sort of cyber-equivalent to sending out dead flowers. Still, Conflict Catcher 3 works better than the new Startup Manager and is worth its stand-alone price.

Now Utilities seems to be at a turning point. Many of its other benefits can be cobbled together through competing, oftentimes superior programs. If you have to have some of the collection's features, such as Super Boomerang, the package may be worth the investment, but be careful, be very careful what you allow to be installed and remember: productivity only counts if you're working, not configuring utilities. —*Robyn Weisman*



GOOD NEWS: Provides a useful set of utilities on one convenient CD-ROM.
BAD NEWS: It can slow your system considerably. Some of its individual utilities are not as good as its competitors'. Way too much to worry about at once.



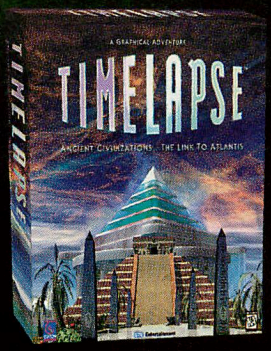
Journey through five SGI-rendered, faithfully recreated 3D environments and unravel the secrets of Easter Island, Egypt, Atlantis and the Mayan and Anasazi worlds.



Embark on a compelling, puzzle-solving adventure with stunning full-screen, photo-realistic, ray traced graphics as you travel through time and space.



Enjoy over 40 hours of challenging gameplay with multiple endings as you attempt to reach your ultimate destination... Atlantis.



A Graphical Adventure

Free demo disk
www.im.gte.com

GTE Entertainment

THIS OCTOBER, JOURNEY TO ANCIENT CIVILIZATIONS, DISCOVER AN ALIEN RACE AND SHATTER THE THEORIES OF MODERN SCIENCE.



PC&MAC CD-ROM

RATING PENDING RP

© 1996 GTE Entertainment. All rights reserved. The GTE logo is a trademark of GTE Corporation. Timelapse and GTE Entertainment are trademarks of GTE Vantage Inc. All other trademarks and trade names are the properties of their respective holders. For more information call: 1-800-GTE-TODAY. Call 1-800-771-3772 for Information on Game Ratings.

Ask about Free Software with your order

United CD ROM®

FREE SOFTWARE with every purchase!*

SAME DAY SHIPPING!

CALL US NOW FOR A FREE CATALOG!

1-800-864-8334

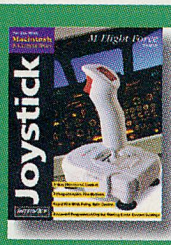
1-800-UNITED4

OVER 8,000 TITLES IN STOCK DAILY!

Call 1-800-864-8334 for great prices on your favorite games reviewed in this month's issue of **Mac Addict**.



CH FLIGHTSTICK PRO
by CH Products
The ultimate combat stick for all IBM & compatible PC's with 3 fire buttons, trigger, throttle, trims, & much more.
38253 **$69**



MAC FLIGHT FORCE
by Interact
Includes 8 way directional control, 2 programmable fire buttons, rapid fire,rate control & advanced programmability for sharing game control settings.
51063 **$34**

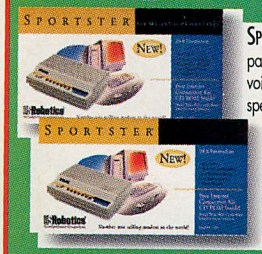




MAC GAMEPAD: Nintendo-style controller with 4 programmable buttons, index fire buttons, control pad & removable joystick handle.

MOUSESTICK II JOYSTICK: Features 5 programmable fire buttons with index finger fire button.

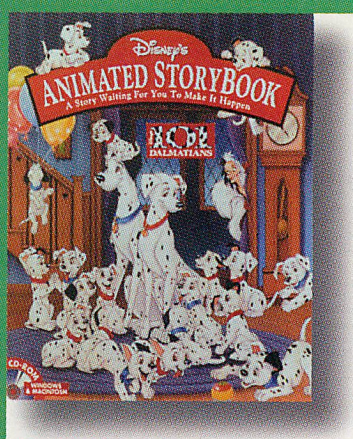
Total Control!
Gamepad 28322 **$23**
Mousestick 15770 **$33**
Advanced Gravis



SPORTSER 28.8 VOICE FAXMODEM: Now one compact easy to use solution lets Mac users manage voicemail, faxes & data transmissions. Duplex speakerphone capability, message retrieval & more.

SPORTSER V34 MAC & FAX EXTERNAL: Offers easy e-mail, friendly faxing & outstanding online capabilities. Includes the Internet Connection Kit with World Wide Web guidebook & much more!!

Communicate!
Sportster 28.8 50763 **$199**
Sportster v.34 49579 **$169**
US Robotics



101 DALMATIANS ANIMATED STORYBOOK: The latest from Disney! Kids can sing along with their favorite Dalmatians, play intriguing new learning games & explore hundreds of surprise animations. Hours of fun & learning!

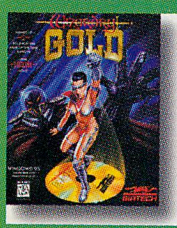
TOY STORY ACTIVITY CENTER: Kids will laugh & learn to infinity & beyond with eight out-of-this-world activities featuring their favorite Toy Story characters. Playing in Andy's room or surviving Sid's room is fun & unforgettable.

HUNCHBACK ANIMATED STORYBOOK: The sound of success will be ringing everywhere as the well-loved tale of bellringer, Quasimodo, unfolds in Disney's most interactive Animated Storybook ever.

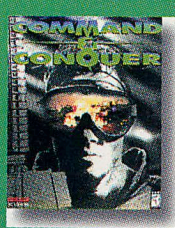
TOY STORY ANIMATED STORYBOOK: As your children read along, its up to them to help Woody & Buzz escape from bad boy Sid, catch the moving van & become best buddies.



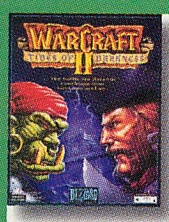
Toy Story Activity Center 54104 **$35**
Hunchback 52643 **$35**
101 Dalmatians 54102 **$35**
Toy Story Animated Storybook 54105 **$32**
Disney



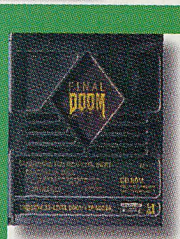
WIZARDRY GOLD
by Sir-Tech
The great Wizardry saga continues with enhanced graphics, new monsters, online manual, spells & weapons & clue-book.
49138 **$38**



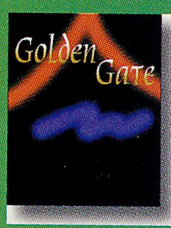
COMMAND & CONQUER
by Virgin
You must decide just where your loyalty rests in the battle for the world's most valuable resources.
53325 **$43**



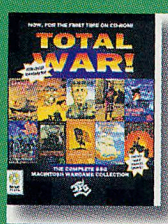
WARCRAFT II TIDES OF DARKNESS
by Davidson
Come to where the battle between the evil forces & the noble humans rages on.
50940 **$44**



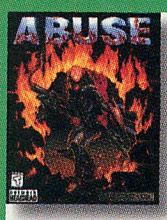
FINAL DOOM
by GT Interactive
The last of the legendary DOOM products features 2 new 32-level episodes–The End of the Undead & The Acid Drenched Hallways.
54538 **$46**



GOLDEN GATE
by Panasonic
Share the treasures of king william, from lost journals to enigmatic omens.
53564 **$35**



TOTAL WAR
by SSG
Contains Gold of the Americas, Carriers at War I, II, Warlords 1, Halls of Montezuma, Panzer Battles & more!
50966 **$38**



ABUSE
by Bungie
Destroy enemies in any direction with grenade & rocket launchers while avoiding deadly traps with jet packs & turbo boosts.
52619 **$36**



MARATHON INFINITY
by Bungie
Answer the challenge of the new Marathon adventure–"Blood Tides of Lh'Owon." 30 levels with new textures, landscapes & monsters.
51559 **$36**

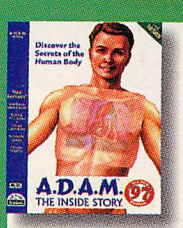
* While supplies last. Shipping charges apply to free offers.
** Orders received as late as 9:30 pm (CST) for 2nd day air. Call for other deadline times.
Special offers, item availability and prices may vary according to format and are subject to change without notice. All prices in U.S. dollars. Not responsible for inadvertent errors.

ORDER AS LATE AS DEC. 23RD FOR CHRISTMAS DELIVERY
Special Holiday Hours: M-F 8am–Midnight; Sat 8am–5pm; Sun 11am–6pm.

CONTACT US!
CompuServe: 76043,1605
America On-Line: UNITEDCD
BBS 1-217-352-9654
Fax back 1-217-352-8123
Fax orders 1-217-352-9749
Int'l orders 1-217-352-8737

ALL MAJOR CREDIT CARDS ACCEPTED

CODE A12



ADAM THE INSIDE STORY 97
by A.D.A.M.
Same great info with all new features – your online doctor answers all of your health questions or connect to the A.D.A.M. Medical Directory.
53100 **$32**

VISIT OUR WEBSITE AT
http://www.unitedcdrom.com

United CD ROM®

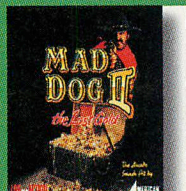
CALL US NOW TO PLACE YOUR ORDER

1•800•864•8334

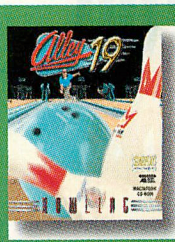
1•800•UNITED4



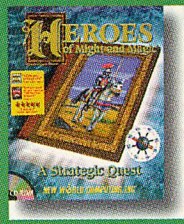
Games of Fame 3
by Starplay
New, mega-hit, mega-value bundle! Full versions of Warcraft, Marathon & A-10 Attack!ILE with 8 missions.
53096 **$35**



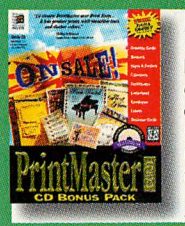
Mad Dog McCree II
by American Laser Games
Challenge your shooting skills. Try to beat Mad Dog to the lost gold & then return to the old mission.
41071 **$36**



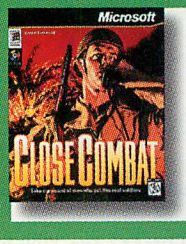
Alley 19 Bowling
by Starplay
Multi-player bowling simulation complete with full motion digitized characters, retro 50's look & digital soundtrack.
53099 **$35**



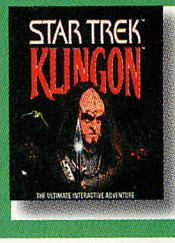
Heroes of Might & Magic
by New World Comp
Recruit & hire the most courageous heroes to help you conquer your world in this strategic fantasy war game.
44753 **$33**



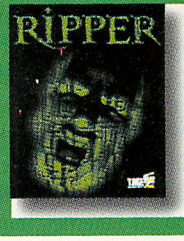
Printmaster Gold
by Mindscape
High quality images & designs make it easy to create, personalize & print great looking greeting cards, elegant invitations & more!
54571 **$33**



Close Combat
by Microsoft
Non-stop World War II battle action lets you deploy weapons, troops & vehicles as either the Americans or the Germans.
54877 **$38**



Star Trek Klingon
by Simon & Schuster
Master the language of warriors or suffer the consequences as you undergo Starfleet's most rigorous holographic training of the Klingon language.
44443 **$38**



Ripper
by Acclaim
In 2060 a vicious serial killer stalks the mean streets of New York eviscerating his victims & vanishing without a trace.
45331 **$47**

Entertainment Titles

34954	11th Hour	.46	
44481	3D Landscape	.55	
43153	3D Ultra Pinball	.41	
51908	3D Ultra Pinball Creep NT	.45	
30459	7th Guest	.32	
46543	A 10 Attack Version 1.1	.44	TOP SELLER
46544	A 10 Cuba Guantanamo Bay	.29	
50558	Academic Edge Piranha Pack	.33	
46961	Alone In The Dark 3	.47	
51910	Anarchy	.45	
49253	Apache	.44	
47921	Archeological Detective	.33	
44726	Ares	.34	
49109	Bad Mojo	.48	
53566	Baldies	.39	
44927	Blackthorne	.35	
52876	Carmen USA 3.0	.41	
51124	Catz	.19	
36939	Chessmaster 3000	.33	
53327	Circle Of Blood	.45	
52891	Clandestiny	.45	NEW!
45552	Comanche	.55	
45846	Congo	.34	
47820	D Zone	.20	
45535	Dagger Fall	.49	
45645	Danny And The Dinosaur	.23	
49750	Darkseed II	.42	
49116	Descent II	.54	
45466	Dig	.26	
45967	Dogz	.19	
40769	Doom II	.33	JUST REDUCED
35174	Dragons Lair II	.37	
47501	Elk Moon Murder	.24	
47600	F/A 18 Hornet 2.01	.43	
51553	F/A 18 Hornet Bundle	.55	
47603	F/A 18 Hornet Korean	.34	
43395	Full Throttle	.26	
45640	Gabriel Knight 2-The Beast Within	.44	
54559	Games Of Fame Vol 1 & 2	.41	GREAT BUNDLE
49182	Hexen	.29	GREAT NEW PRICE
45637	Incredible Machine V 3	.36	
51853	Indy Car Racing II	.54	
53108	Infocom Collectors Edition	.19	
54113	Infomac 9	.19	
48719	Infopedia 2.0	.43	
48254	Island Casino	.39	
50576	Jack X-Tra Large	.41	NEW!
51916	Leisure Suit Larry 7	.54	
51918	Lighthouse	.53	
45971	Lost Eden	.46	
49809	Lucasarts Archives Volume I	.32	
45546	Marathon 2 Durandal	.42	
52466	Mechwarrior 2	.46	
52358	Monopoly	.38	
46067	Monty Python Complete Waste of Time	.42	
54086	Monty Python Quest for the Holy Grail	.50	
49180	Mortal Kombat III	.46	
49807	Mortimer	.35	GREAT FOR KIDS
45845	MTVs Unplugged	.19	
31703	Myst	.47	
44693	Orion Conspiracy	.46	
49516	Over The Reich	.44	
51920	Phantasmagoria 2	.62	
35733	Phantasmagoria	.51	
45631	Prince Of Persia Cd Collection	.20	
48468	Qin Tomb Middle Kingdom	.39	
45465	Rebel Assault II	.26	
45128	Rivers Of Dawn	.55	
52490	Safecracker	.35	
38849	Shadows Of Cairn	.41	
47785	Shanghai Great Moments	.28	
53109	Shanghai II: Dragons Eye	.19	
51111	Sim City 2000 Special Edition	.53	A CLASSIC
51179	Simisle	.37	
50519	Simpsons Cartoon Studio	.33	
43804	Solitaire Antics	.16	
49591	Spycraft	.51	
46228	Star Trek Deep Space Nine	.29	
51576	Starplay Games Of Fame 2	.27	
46237	Starplay Games Of Fame	.27	
44701	Tank Commander	.46	
52646	Timon&Pumbaa Jungle Games	.31	
52414	Top Ten Mac Pak II	.35	GREAT BUNDLE
43161	Torins Passage	.47	
45840	Treasure Quest	.42	
47006	Ultimate Doom	.33	
45850	Ultra Mac Games 2	.20	
49469	Voyeur 2	.40	
52459	Wages Of War	.31	
46209	Warcraft	.30	
53679	Warlords II	.43	
50977	Wing Commander IV	.47	
49138	Wizardry Gold	.35	
53567	Woodstock Vision	.31	
43393	X Wing Collectors Cd	.26	
52463	Zork Nemesis	.59	

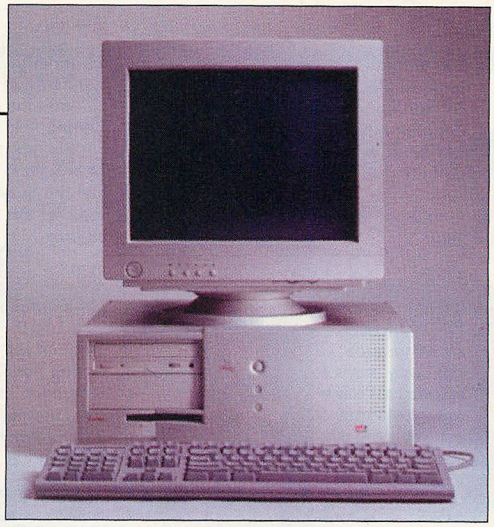
Edutainment Titles

53827	Adventure Oslo Tools and Gadgets	.13	AWARD WINNING
53570	Alphabet Adventure Digby	.31	
54905	Blinky Bills Ghost Cave	.27	
33459	Busy Town	.22	
53569	Dinosaurs Across America	.22	
51940	Dr Brain IV	.41	GREAT SEQUEL
53799	Freddi Fish 2 Bundle	.36	
44482	Garden Encyclopedia	.28	
42631	Grolier MM Encyc American History	.35	
42629	Grolier Science Fiction	.41	
50734	Gus Goes To Cyberstone Park	.11	
50725	Gus's Kooky Carnival	.11	
52434	Highlights Puzzlemania	.22	
51339	Hunchback Notre Dame	.29	
50728	Incredible Toon Machine	.11	
39215	Jewels Of The Oracle	.33	
46191	Kids Mac Pack	.22	GREAT BUNDLE
53794	Lets Explore The Farm	.19	
53795	Lets Explore The Jungle	.19	
50672	Lets Pretend Vol 3	.13	
50673	Lets Pretend Vol 4	.13	
50674	Lets Pretend Vol 5	.13	
40438	Mario's Game Gallery	.28	
40261	Math Blaster In Search of Spot	.37	AWARD WINNING
38149	Math Rabbit Deluxe	.44	
40711	Megamac Pak Vol 1	.30	
53842	Monster Fun & Learning	.18	
41934	Mooky Oke	.23	
53571	Multiplication Tour	.31	
49083	Muppet Treasure Island	.37	HOT NEW TITLE
54869	My First Amazing Words	.27	
45870	Nick Jr Play Math	.18	
50729	Night Light	.11	
44129	Operation Neptune	.39	
38017	Oregon Trail II	.53	
53800	Pajama Sam	.36	
44793	Passion For Art	.36	
53796	Putt Putt Goes To Moon	.19	
53797	Putt Putt Joins Parade	.19	
35275	Reader Rabbit 1 Deluxe	.40	
35276	Reader Rabbit 2 Deluxe	.44	
38063	Reader Rabbit 3 Deluxe	.43	
50979	Schoolhouse Rock Math	.36	NEW!
38154	Supersolvers Gizmos	.39	
38153	Treasure Galaxy	.39	
34698	Treasure Mathstorm	.39	
38152	Treasure Mountain	.39	
38885	Your Personal Trainer SAT 2.0	.34	

reviews

SuperMac J700

DEVELOPER: UMAX Computer Corp.
CONTACT: 800-232-8629; http://www.supermac.com
PRICE: $3,000 (street)



MAY I HELP UMAX? The J700 fits a particular niche, works hard, and has a neat, swoopy box to boot.

Sometimes subtlety makes all the difference. Such is the case with the SuperMac J700. At first glance, the J700 seems just like several other Macs on the market, with a 150MHz PowerPC 604, 16MB of RAM, and a 2.1GB SCSI hard drive—been there, done that. Ah, but the Big Three Specifications alone do not a Macintosh make.

With the J700, it's the little things that count. For example, the J700 also comes standard with an IMS TwinTurbo video card (with 2MB of VRAM on board, which makes for zippy Photoshop work), on-board Ethernet (not too useful in a home setting), two ADB ports, interleaved memory, a 512K cache card, and microphone and speaker ports in front for easy access. There's also a speaker port in back for external speakers. It's these finishing touches (plus a snazzy case) that make the J700 worth its price.

Aside from the amenities, the J700 has plenty of room to grow. Eight DIMM slots allow RAM to be expanded to a whopping 1GB (if you have that kind of money). Since the standard 16MB of RAM is on the motherboard, all eight slots are available for expansion without sacrificing a RAM card. Besides five internal drive bays which leave room for all kinds of SCSI fun, the J700 also comes with four PCI slots so you can add cards to your heart's content (and your wallet's discomfort). Access to all this expandability is a bonus as well. The interior is roomy with plenty of space to pull out RAM cards and PCI cards, and, like most new Macs, the processor is on a daughtercard, so you can upgrade to a faster processor at a later time, giving your investment a longer life.

PERFORMANCE Down to the nitty-gritty. How does the J700 feel on the open road? About as you'd expect, given the J700's workhorse 150MHz 604 processor. It's speedy and responsive, a pleasant surprise after working on slower Macs. Setup out of the box took only minutes, and the machine sprang to life with a touch of the power key. We did have some difficulty with the on-board Ethernet card, which didn't recognize our network, but a technician from UMAX came to the office to fix the problem. UMAX offers toll-free technical support and a one-year warranty on parts and labor, including three-day on-site support. If you purchase a J700 and have a problem, you may have a friendly UMAX technician knocking on your door to help. How's that for service?

According to Speed Tester 2.0, the J700 performed almost exactly as fast as a PowerCenter 150 in processor speed, floating point calculations, and basic graphics rendering—a good thing, considering how similar these machines are to each other in design. Here's where the little touches count. Because of the standard IMS TwinTurbo video card, video-intensive applications like Photoshop were significantly zippier. Running an Unsharp Mask filter followed by an Emboss filter took 30 percent longer on the PowerCenter 150 without video acceleration than on the J700.

TELL IT LIKE IT IS At first, the $3,000 sticker price for the J700 seemed steep. After all, a base PowerCenter 150 comes in at only $2,095. However, when the J700's little extras are all added up, it becomes apparent that the J700 is a real contender in the Mac market. A similarly equipped PowerCenter 150 is $2,860 (including an IMS TwinTurbo with 4MB of VRAM). The PowerCenter 150 has only three PCI slots and doesn't take advantage of the small speed gain from interleaved memory, has only one ADB port, and has its microphone and speaker ports in the back of the machine.

The J700 occupies an odd marketing spot. It's too expensive for many home users (who won't need Ethernet or the TwinTurbo card), and it's not high-end enough for bleeding-edge graphics professionals (who can now buy a 225MHz 604e-based Mac). It does have its place, however. If you're a home graphics guru or you need serious expandability, then the J700 is your Mac.
—David Reynolds

Why Choose a J700

Thanks to Mac clone manufacturers, Mac buyers have choices. So why choose a J700 when there are several Macs on the market with the same base processor?

- Expandability. The J700 has plenty of room to grow: it has five internal drive bays (two of which are already occupied); its RAM can be expanded to 1GB; and it has four PCI slots.
- Built-in TwinTurbo graphics accelerator. With the IMS TwinTurbo, the J700's on-screen rendering (such as with Photoshop) is noticeably zippier.
- Interleaved memory. Although memory interleaving appears on some Macs, it isn't standard on all. Interleaving provides quicker access to the contents of RAM, and results in a small performance gain.
- Swappable processor. Again, many new Macs can have their processors replaced with faster ones—many, but not all. By swapping processors, you can take advantage of newer, speedier processors without having to buy a whole new Mac.



GOOD NEWS: Built-in IMS TwinTurbo card and interleaved memory show performance boosts upfront. Nice touches make for an elegant Mac.
BAD NEWS: 16MB of RAM is a little slim for a higher-end Mac. Floppy drive is low and sometimes interferes with the keyboard. Problems with the Ethernet card.

Cool. Adobe PageMill™ Now Includes A Color Scanner.

only **$599!** suggested street price



Mac™ OS

Introducing the Microtek ScanMaker® Internet Edition™ color flatbed scanner for Macintosh.™

If you want to include eye-catching images in your Internet or Intranet home pages, get Microtek's *ScanMaker® Internet Edition* color flatbed scanner with *Adobe PageMill*. Images captured with this scanner will make any home page spring to life!

The ScanMaker Internet Edition captures photos, drawings, and company logos with amazing high-light and shadow detail in stunning lifelike color.



Includes Adobe PageMill,™ and MicroFrontier's Color It!

To quickly and easily create home pages, Microtek includes Adobe's popular *PageMill*™ software. You don't have to be a software programmer. There's no HTML code to learn. Just point, click, drag and place the images scanned with the ScanMaker Internet Edition scanner. In a few minutes you've got a home page sure to catch any surfer's eye.

For capturing images for fliers, brochures and newsletters this amazing scanner also includes *MicroFrontier's Color It!* image editing and paint software.

The ScanMaker Internet Edition also includes Microtek's award-winning *ScanWizard*™ scanner controller software. ScanWizard features the *Advanced Image Enhancer*™ which lets you sharpen, blur, darken, lighten, saturate, emboss images and even remove dot patterns from printed photos or add other special effects to images *even before scanning them!*

For the location of your nearest authorized Microtek reseller call 1-800-654-4160, use our convenient Auto Tech fax back system at 310-297-5101 or check out Microtek's home page at **http://www.mteklab.com** or **http://www.microtekusa.com**.

INTERNET EDITION

INCLUDES

- **Adobe PageMill™** the hot selling software for creating home pages for the World Wide Web
- **ScanWizard™** scanner controller software featuring the **Advanced Image Enhancer™**
- **MicroFrontier's Color It!** for enhancing or painting scanned images
- **OCR software from Caere Corporation** for scanning printed text documents



FEATURES

- **600 x 1200 dpi optical resolution**
- **4800 x 4800 dpi enhanced resolution**
- **Extremely life-like color**
- **24-bit color depth / Single-pass speed**

NOW AVAILABLE FROM:
MacWarehouse
MacMall
MacConnection
CDW
Club Mac
MacZone

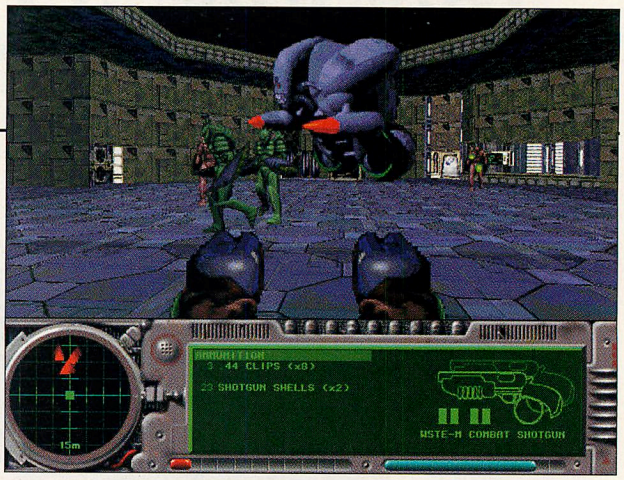
MICROTEK
Better Images Through Innovation.

The Microtek ScanMaker Internet Edition is available for Macintosh users only. Price mentioned is United States suggested street price. The following are trademarks or registered trademarks of their respective companies: Microtek, ScanWizard, Advanced Image Enhancer, ScanMaker of Microtek Lab, Inc.; Macintosh, of Apple Computer, Inc.; Color It! of MicroFrontier; PageMill of Adobe Systems, Inc. All other trademarks or registered trademarks are the property of their respective holders. Prices, specifications and software bundles are subject to change without notice. SMINTED796MA

reviews

Marathon Infinity

DEVELOPER: Bungie
CONTACT: 800-295-0060; http://www.bungie.com
PRICE: $34.99 (direct, srp)
REQUIREMENTS: 68040 or PowerPC, System 7.1 or later, 6MB of RAM, 65MB of hard drive (full install), 19MB of hard drive (small install), 256 colors



WHAT YOU DON'T WANT TO SEE: The dual shotguns from Marathon 2 are still cool, the big guys are still dangerous, and the floating Juggernaut is still very, very well-armed.

FIND A DEMO of Marathon Infinity on The Disc.

THEY'RE EVERYWHERE! And indeed they are: the Pfhor, the S'pht, the Flick'ta, those crazy Artificial Intelligences, and you're right in the thick of it, as usual.

At the end of Marathon 2, Durandal—the rampant AI that was once the onboard computer for the colony ship Marathon—triumphed over most of the Pfhor fleet, the Pfhor-appropriated AI Tycho (once just another system on the Marathon), and various enslaved races. (For a summary of the plot of both Marathon 1 and 2, see Hamish Sinclair's excellent "Marathon Story" Web site at <http://www.amug.org/~ marathon /story>.) We were lead to believe Durandal was off to a distant part of the galaxy, after threatening, cajoling, and tricking you into doing his dirty work: slaughtering countless enemies. Which was fun, of course. But now things have gone horribly, horribly wrong, as they so often do.



I HAVE YOU NOW: One office mate may be in your sights in a networked game, but check the motion sensor: your tech support guy may just be sneaking up behind you.

It seems that when the Pfhor, in a last-ditch effort to stop Durandal, deployed the "Trih Xeem," an ancient weapon that forces stars into nova, it freed... something... from the core of the sun, a something that might be a chaotic threat to the entire universe. Needless to say, everyone's up in arms about it.

So in Marathon Infinity you are once again pressed into service first by Durandal—who seems as unbalanced and enigmatic as ever—and then by Tycho, who kidnaps you for his own purposes, which include, but may not be limited to, destroying Durandal. Your loyalty is a complex issue, and with Infinity's (limited) branching gameplay, whom you believe and follow could affect where you end up and in what shape. It's really the ambiguity and paranoia the scenario inculcates in you that makes all the running around, solving locked-door puzzles, and blasting things to bloody bits, more than just a Doom clone.

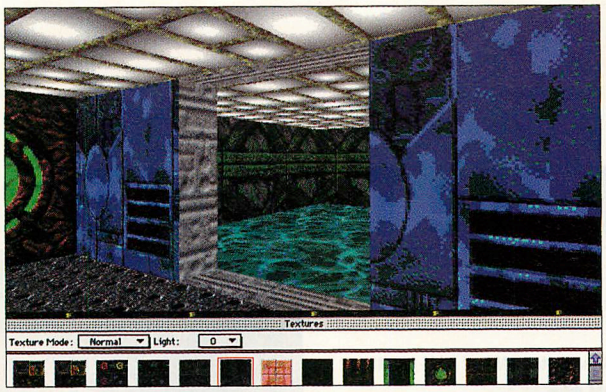
Though the game engine is basically unchanged from Marathon 2 (there's now the ability to have distinct Physics Models for each level), Bungie has really put together a package that is more than just additional levels. It seems they took to heart criticisms of Marathon 2 that claimed it lacked the dark, "Alien"-like feel of the original; the new texture sets and map designs are totally successful in immersing you in the feel of making your way through strange corridors in spaceships, stations, and sewage pumping plants. In fact, the first level of Infinity feels from the start like an homage to "Arrival," the first level of the original. And though there are only a few basic missions throughout the game (Exploration, Retrieval, Repair, Rescue, and of course Extermination), these are integrated so well into the plot that they rarely seem to repeat.

In a way, if you've played the previous Marathons, you'll feel right at home in Marathon Infinity. The excellent gameplay is unchanged (no jumping or crouching, no new monsters except fusion-packing VacuumBOBs, and RUN!), and even your Preferences such as keyboard layout can be imported. On the other hand, some of what you thought you knew is wrong. Are you doing the right thing, helping Tycho attack Durandal, who, after all, is responsible for both your misery and your existence? Why do you have such a queasy feeling when you shoot BOBs (the Born on Board [Marathon] humans), though if you hesitate, one AI or another may just teleport you into space. And what's up with the story about somebody walking on the street, finding a broadsword, and being chased by Men in Black? There's more than enough to keep your brain turning over as you shoot, napalm, and pierce (with an all-new Flechette gun that's terrifically accurate and works in the water or PfhorSlime, but goes through ammo way too quickly) your enemies and solve each level's puzzles, which unfortunately seem to be mostly of the find-the-switch-then-the-door-it-opened kind. And this time, Bungie has added a few fatal traps here and there, so save frequently.

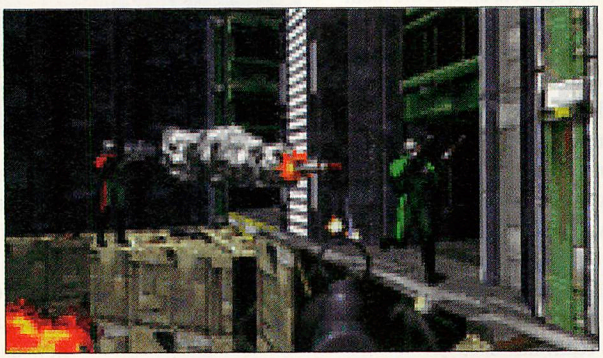
Maps from Marathon 2 can't be used wholesale, but with a little ResEdit fiddling, everything will work.

In addition to the 25 levels that make up the solo adventure, Infinity also includes 24 network levels. If you've always been a solo player who dismisses these as "not part of the real game," give a net-

work game a try, once. That's all it takes. We at MacAddict, who of course are way too busy putting out a quality publication to play games, finally set up a local game and it was more fun than you can rightfully imagine. There's just no greater thrill than turning a corner, sighting a colleague, and letting a SPNKR missile go right in his (or her—nondiscriminatory blasting) face. [Look for an Map of the MacAddict offices on the Web site.] Some of the maps are slight revisions of old favorites, while others are brand-new. When you gather a network game, you can: choose to include aliens; set the game duration, team play, and the game type: Every Man for Himself, King of the Hill, Tag, Cooperative (for you wimps), or Kill the Guy With the Ball (where the goal is to hold on to a skull for longer than anyone else, despite the fact that you can't run and are weaponless while you hold the gruesome thing). There's no plot, no cryptic messages from all-powerful computers, no ambiguity. Just kill. Good fun.



3D READY: ... with the Texture Palette open (along the bottom), Forge makes it a cakewalk to paint your map.



MOVE IT!: Nice try, Green, but you can't outrun a SPNKR missile.

"Carnage Forever" claims Bungie, and with the release of Forge and Anvil, two powerful Marathon customization applications, this may not be pure hyperbole. Forge is the map-making editor Bungie itself used to create levels for all the Marathons, and though Steve Israelson's (steve_israelson@mindlink.net) freeware program Pfhorte has been an incredibly successful and useful tool (especially given its labor-of-love status), Forge takes the next step. Not only is there a 2D plan editor environment, but Forge also offers a 3D walkthrough environment where you can "paint" textures on walls, floors, terminals, etc. as you navigate the space you've created exactly as you would if playing the level. Though it's simple enough to learn the basics of Forge (and the included tutorial movies are excellent: we wish *all* applications included such), the complexities of mapmaking soon become apparent. Still, it's easy enough to put together a basic map, and then assign to it basic level parameters, such as mission or environment type (vacuum, low gravity, etc.). And with Anvil, Bungie's physics, shapes, and sounds editor, you can alter the created environment to look, sound, and behave as you wish. Also, Anvil will work with both Infinity and Marathon 2 files, and import sound files from Marathon 1. This is not a build-it-from scratch kind of editor, though: to make your ideal monster, you first must create a PICT file in a pixel-based program such as Photoshop and reduce it to a Marathon-specific 256-color palette (keeping in mind that Marathon reserves a particular medium blue to mark transparent regions of the bitmap). It's also a bit confusing to edit physics models, since this can also be used to redetermine the behavior of aliens, effects, and small things like gravity. Go wild, but remember: Always work on a *copy* of your original files.

All in all, this is one of the most complete gaming packages we've seen, and definitely the most involving first-person shoot-'em-up. Though newer games, such as Quake (for that other platform), have more advanced, true 3D engines, they just seem boring next to Marathon. After all, who can forget the experience of squeezing through a vent core, hearing the howl of a hunter, and realizing: I'm out of ammo!

—D. D. Turner

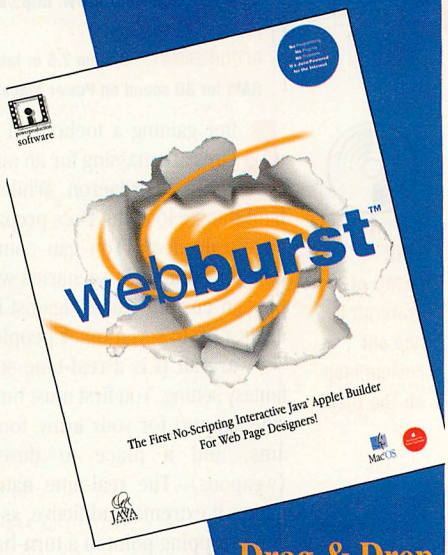


GOOD NEWS: It's Marathon! Included map and shapes editors are easy enough to use. Ambient panning sounds and dark, involving plot are still miles ahead of other games.

BAD NEWS: It's still Marathon. Engine has only minor tweaks from Marathon 2, isn't truly 3D, and is starting to show its limitations. High quality game sucks you into an alternate reality.

High Performance Interactivity for the Web!

Unplugged



Drag & Drop JAVA™

No limits
No plug-ins
No programming

Available NOW!

Add smart interactivity to your web page. From simple rollover buttons and links, to complex animations, paths, sound, motion, and enduser input.

- Create graphic and multimedia layouts layering text and images with hotspots.
- Add interactive menus to your online documents.
- WebBurst is extensible for instant database and CGI connectivity.

If you can do it on CD-ROM, you can do it with Java in WebBurst. No programming ... just export to Java-powered Applet.

Interactivity Unplugged!

PowerProduction Software
1-800-457-0383
www.powerproduction.com

reviews

WarCraft II: The Tides of Darkness

DEVELOPER: Blizzard Entertainment
CONTACT: 800-953-SNOW; http://www.blizzard.com
PRICE: $48.95 (Street)
REQUIREMENTS: System 7.5 or later, 68040 or better, 8MB of RAM (12MB of RAM for 3D sound on Power Macs), CD-ROM drive

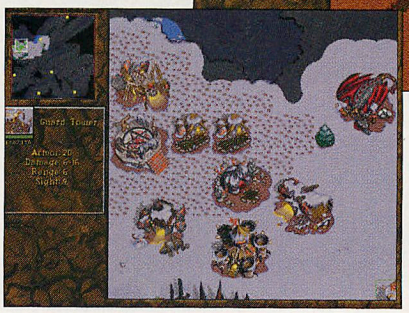


ORC WARLOCK GUL'DAN has up and left the war effort to find some daemon vaults. Kill the daemons and bring back Gul'dan's and his buddy Cho'gall's heads on a prized platter.

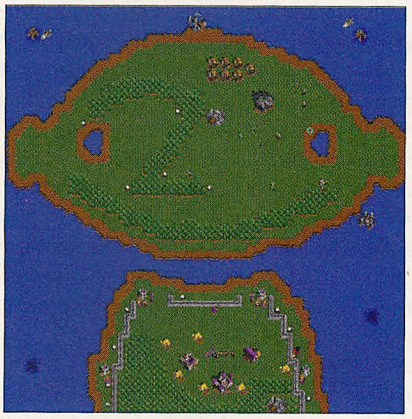
FIND A DEMO of Warcraft II and our custom map on The Disc.

After gaining a toehold in the human lands in Warcraft I, the Orcs are massing for an attack across the sea, against the mainland of Lordaeron. While the humans rally to take back the land they've lost, the Orcs prepare to crush their ancestral enemy. You can command either the Orcs or humans in scenarios which advance the plot, in custom games against the computer, or against up to seven other people on a network.

Warcraft II is a real-time strategy game in a fantasy setting. You first must build a town to provide support for your army, food for your peasants, and a place to develop technology (weapons). The real-time nature of the game makes it extremely addictive, as there's really no good stopping point in a turn-based game—you really can't stop until the game is over. The sound is integral to the game too. Aside from the stirring war music in the background, you really do need the feedback of the units—if you stop hearing your peasants chop wood, for instance, you know you'll need to direct them to a new stand of trees. And if you keep selecting a unit, they give progressively funnier responses. We're particularly fond of the goblin's "Kaboom!"



IT'S HARD TO BUILD A NICE ORDERLY CITY with an live human controlling the other side. Allow at least an hour for network play.



CREATE CUSTOM MAPS like this one of Max with the Warcraft II map editor. The tools are a little primitive—we want an undo command.

Warcraft II is not your ordinary sequel—there have been so many additions and improvements that it almost feels like a different game. The original Warcraft's art was a blocky suggestion of a unit, but the new version has depictions that are much more detailed—you can see the plate mail on the footmen, the peon's axes, and the rows of crops planted on a farm. There's also the odd critter milling about, which really doesn't do much but get in your way—at least they make satisfying squeals when you slaughter them.

You'll also notice new army types, and naval and air units, too. As humans, you get paladins who can exorcise the living dead, and your mages can now turn Orcs into sheep—hmm, maybe that's where all the critters came from. Oil is a new resource to be managed—it fuels battleships, destroyers, transports, and submarines. Air units include bizarre flying contraptions devised by gnomish inventors and gryphon riders.

On the flip side, Orcs control Ogre-mages who can incite bloodlust in your troops, and Dark Knights who sap the life-force (health points) out of opponents. On the sea, Orcs command juggernauts and sea turtles, and in the air... oooh, dragons! And of course, all these troops have their own support buildings. At first, the sheer number of different troops to command (and counter) seems overwhelming. But as you play through the scenarios, you learn which strategies are effective against the each unit.

Blizzard didn't just add a bunch of new units into the game—gameplay has improved, too. You no longer have to make roads for your buildings. Your units can patrol their vicinity in a loop, which means you can spread yourself a little thinner. The behavior of moving a unit from point A to point B is changed; a unit will actually try to go in a straight line, rather than hug the edge of the nearest building. This means that in going long distances, your units may get stuck, but in the short run, they get there faster. You can now give "auto-commands" to your armies by command-clicking them. This will make peasants mine, footmen attack, or just move pieces to unoccupied territory.

This means that the command-clicking to move the mini-map in the original Warcraft no longer works, though you can set Warcraft II to accept that method. Unfortunately this doesn't extend to the map. In the new version, just touching the sides of the map will scroll it (instead of click and hold). For the most part, this is the desired behavior. However, when casting spells in a battle situation (i.e. very quickly), the map will sometimes scroll at the most inopportune time.

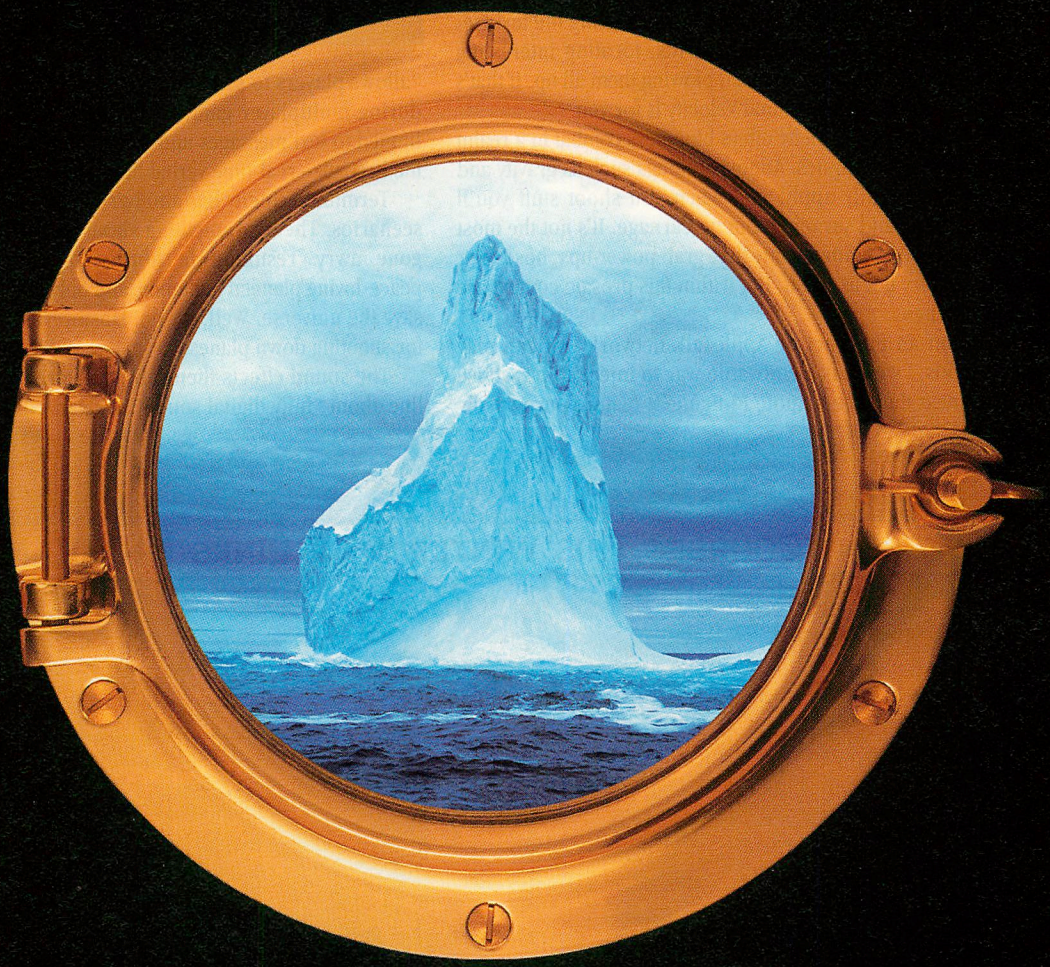
But this is just picking nits. We loved Warcraft II so much we could have gone on for pages extolling its virtues. Simply put, Warcraft II belongs on every gamer's Mac. —*Kathy Tafel*



GOOD NEWS: Engaging game entertains for hours. Smart installer tells you just what you need. Special features such as speech recognition and 3D sound are only in Mac version.
BAD NEWS: You will be groggy from staying up until 4 a.m. Casting spells is hard with autoscrolling map.

TITANIC

ADVENTURE OUT OF TIME



This November, race to alter history on a ship out of time.

Free Demo Disk: www.im.gte.com/titanic

©1996 CyberFlix, Inc. All rights reserved. CyberFlix is a trademark of CyberFlix, Incorporated. The GTE logo is a trademark of GTE Corporation. GTE Entertainment is a trademark of GTE Vantage Inc. Other brandnames and product names are trademarks of their respective corporations. CyberFlix, 4 Market Square, Knoxville, TN 37902, Phone: 423.546.1157 Fax: 423.546.0866 Tech Support: 423.546.7846 E-mail:support@cyberflix.com. Call 1-800-771-3772 for Information on Game Ratings.

GTE Entertainment

reviews

Terminal Velocity

DEVELOPER: MacSoft
CONTACT: 612-559-5301; http://www.wizworks.com
PRICE: $49.95 (srp)
REQUIREMENTS: Power Mac, 8MB of RAM, 40MB of hard drive space (minimum install), 117MB of hard drive space (full install), CD-ROM drive



HI YO, BOGEYS: Without actual physics to worry about, it's a breeze to skim the surface and blast those energy bunkers (they blow up so nicely, too).

Does peppering elusive bogeys with plasma cannons sound like your idea of fun? Perhaps you'd enjoy exploring the texture-mapped terrain of nine alien worlds, locating interesting landmarks and unusual aircraft... then blowing them all up. If that's what you're into, pal, then Terminal Velocity is for you.

At its core, Terminal Velocity offers bloodless combat in a realm freed from Newtonian physics. Annoying things such as gravity and momentum don't really apply, and when you shoot stuff you'll see plenty of flame and shrapnel, but no carnage. It's not the most original: Zip around, evade enemy fire, grab power-ups, hose your opponents, and try not to crash. But within this prosaic context are some nifty touches...

If you're on an Ethernet or AppleTalk network you can play against "friends," which is a enjoyable way to inject a little abuse into the business day. The Remote Ridicule™ feature purportedly "allows players to send digitized voice messages to other players during multiplayer games," but unfortunately, this seems to be limited to text messages and some canned sounds, triggered from the keypad—real-time verbal harassment is not supported.

Terminal Velocity has another one of those incomprehensible scenarios. There's something about futuristic defense computers gone awry, resulting in hordes of aliens overrunning our peace-loving planetary alliance, and only the noble fighter pilot can save the universe. Well, it's not Dostoyevksy, but it's good enough for shooting down planes.

The sound effects themselves are pretty good (though the ad line about "fully digital sound" is a canard—*all* computer sound



is digital) and truly enhance the gaming experience. The music, unfortunately, is as generic as it comes. Hit the M key to turn off the music, and crank your own tunes.

The Terminal Velocity cockpit view is a typical assortment of gauges and indicators. The only thing in the cockpit that really matters is the radar dial, which instead of acting like a compass, conveniently points the way to your next target, checkpoint, or tunnel. Use the C key to toggle among the full cockpit view, radar only, and all instruments hidden. You also have the option of viewing on-screen crosshairs, seeing a full-screen radar view, and toggling a view of the player sprite.

Once you're airborne you'll immediately encounter Terminal Velocity's biggest single problem: When firing weapons, you lose control of your craft—you basically can't change course as long as you have missiles in the air. Perhaps drawing the weapons fire taxes the CPU too much to allow simultaneous steering and shooting. On a positive note, when you're hit by enemy fire, it can knock you slightly off course, which really adds to the challenge of the game.

Gameplay proceeds along familiar lines: Destroy all architecture and weapons systems while keeping airborne enemies off your tail. You're equipped with Plasma Assault Cannons (PACs) at the outset; you pick up additional weapons as you proceed. Be on the lookout for power-ups such as shield strength and additional speed, which are revealed as you lay waste to each world. Be sure to squander firepower on the flora; trees burst into flame spectacularly—imagine that you're defoliating the last of the old-growth forest!

Not all the flying is above ground; on each level you'll find subterranean tunnels that contain (predictably) more power-ups and enemies. Be sure to back off the throttle when you're underground, as it's easy to grind the ship right into a game over if you steer. Also, zoom up above the cloud level to a whole new environment. It's three, three games in one.

Terminal Velocity allows a full 360 degrees of pitch—just be careful pulling 180-degree turns, as you're liable to slam head-on into pursuing opponents. And keep an eye out for mountain ranges when descending from the clouds.

Though many aspects of this title, particularly the marketing gaffes, are embarrassing, none of them really interfere with the essential playability. Moreover, Macfolk just don't have as wide a selection of flight combat games as our Wintel brethren, so we should enjoy what we have. The bottom line is that Terminal Velocity is fun: It's wholesome mindless abusement, and it induces the type of addictive/compulsive response many seek in computer games.

—Todd Souvignier

TV Tuning Tips

1. Keep on course, usually: Follow your direction pointer to the next goal of the mission, though you may find a few useful power-ups if you stray.

2. Keep your nose up: Though bouncing off the ground doesn't damage your ship (odd, that), it'll knock your speed down to zero, and no one likes a sitting duck—except your enemies.

3. Punch it: After finishing one mission goal, hit the afterburner to get to the next one ASAP—there's no profit in wiping out every stray enemy. Watch out, though: the ground can come up really quickly.



GOOD NEWS: Smooth graphics and gameplay. Simple flight engine for those not deep into flight sims.
BAD NEWS: Silly and irrelevant plot. If fog is off, the edge of the world is closer than you think. Cheesy music. Little depth to play.

THE PHENOMENAL INTERACTIVE MOVIE!

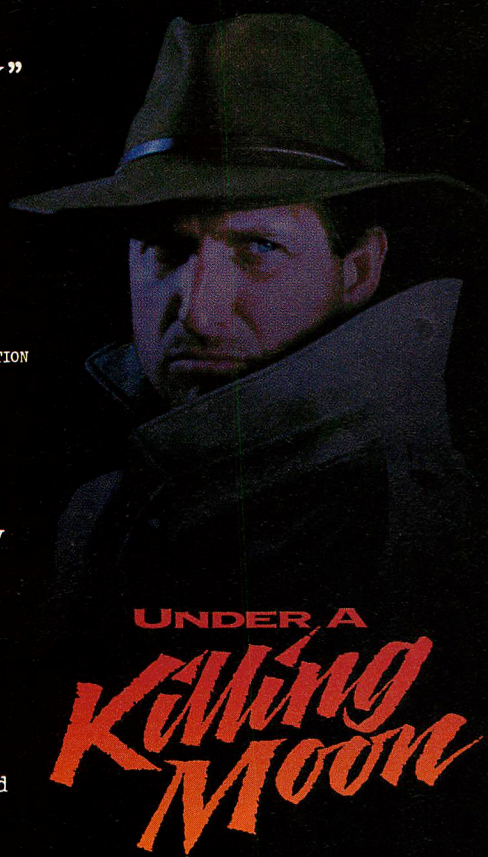
NOW AVAILABLE FOR THE MAC!

"★★★★★"
-COMPUTER LIFE
-MULTIMEDIA WORLD
-FAMILY PC

"BEST ADVENTURE GAME"
-CD-ROM TODAY
-SOFTWARE PUBLISHING ASSOCIATION
-STRATEGY PLUS

"Long into the night (I was) desperate to find each clue and explore every venue, utterly oblivious to the passage of time."
-HOMEPC

"The first game to provide a 'go-anywhere' realistically rendered 3-D environment."
-USA TODAY



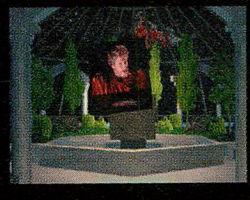
UNDER A KILLING MOON—It's December 2042 and Tex Murphy, the last of the old-style PIs, has hit rock bottom. Then a priceless statuette is stolen. From the shadowy back streets of post-apocalyptic San Francisco come rumors that an ancient evil, foretold by prophecy and worshiped by and ancient blood cult, has mysteriously reawakened.

When Tex is hired to find the statuette he plunges into a labyrinth of deceit, manipulation and murder. He'll need all of his PI instincts and every ounce of Murphy savoir faire to resist the seduction of darkness and stop the forces of evil—before the terrifying prophecies become reality.

Under A Killing Moon stars Brian Keith (*Hardcastle & McCormick, The Parent Trap*), Margot Kidder (*Superman I, II, III*), Russell Means (*The Last of the Mohicans, Natural Born Killers*), and features the voice of James Earl Jones (*Star Wars, Field of Dreams, The Lion King*).







CALL 1-800-800-4880
WWW.ACCESSSOFTWARE.COM

ACCESS SOFTWARE INCORPORATED

reviews

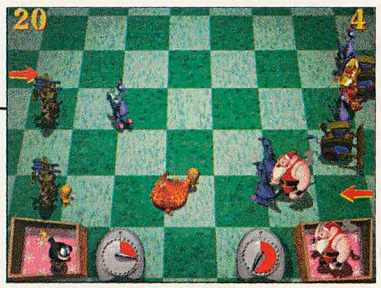
Gearheads

DEVELOPER: Philips Media
CONTACT: 800-883-3767; http://www.philipsmedia.com/media/games
PRICE: $49.95 (srp)
REQUIREMENTS: 25MHz 68030 or PowerPC, System 7.1 or later, 8MB of RAM, 10MB of hard disk space, 13" color monitor with 256 colors, CD-ROM drive

The premise is simple: Wind up toy after toy, drop 'em on your side of the field, and try to get 21 of them over your opponent's goal line before he reciprocally encroaches on your space. Sure, and chess is simple too.

Playing Gearheads is a blast—and would be, even without the Walking Timebombs. You can duel the computer or a human opponent (who, in the good-old-fashioned way, has to share a keyboard with you), or enter an arcade-like Tournament. In this, you square off against the computer, gaining or losing a 'life' with each victory or defeat. After every third win, you reach a Challenge level, which provides a new twist on the already twisted Gearheads environment.

Each of the 12 toys has a distinctive personality and tactical advantages. As the battle rages, you must select your next toy to release, wait until it winds (a strategic choice, as some toys take more time to wind), and then let it go along your side of the screen.



TOYS, TOYS, TOYS!
As battle is joined on the kitchen floor.

Some, like Orbit the flying saucer, fly in straight lines, while others, like Deadhead the skull, move erratically. And each toy does something, well, weird. Disasteroid is slow, but steady, and blows away anything in its path. Handy the glove can rewind unwound toys on the field. And Krush Kringle (the steroid Santa toy) pounds the ground and makes nearby toys reverse direction. In duels, you can choose how many and which toys to have at your disposal, and the offensive and defensive combos will delight even hardcore gamers.

There's twitch enough for people who like twitch, tactics for the brainier bunch, and wonderful toys that had us all laughing. If you don't like Gearheads, you need a serious infusion of something vital. *—D. D. Turner*

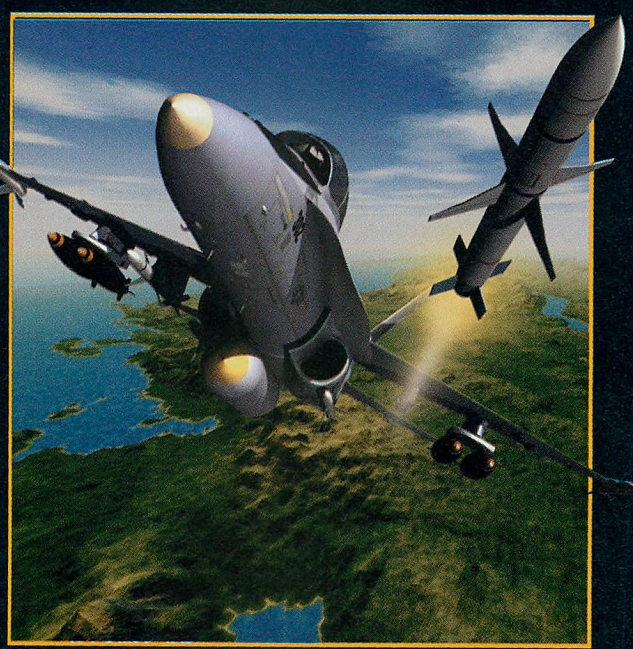


GOOD NEWS: "Wicked cool" toys really are cool. Fun and funny, and still so after hours of play.
BAD NEWS: Limited levels and playing fields, without expandability. No network capabilities.

F/A-18 HORNET 2.0



"...this is the finest flight-sim on the market!"
—Mac Action





"The look and feel are top-notch..."
—Strategy Plus



"If you want a modern flight sim, look no further."
—MacHome Journal



EDITORS' PICKS 1995 MacHome Journal

F/A-18 HORNET 2.0
www.graphsim.com/graphsim

GAME HALL OF FAME MacWorld 1994

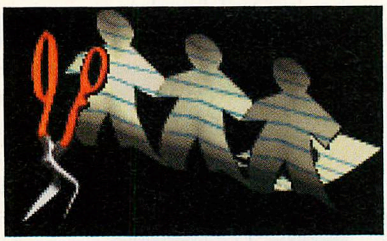
GRAPHIC SIMULATIONS CORPORATION

After Dark 4.0

DEVELOPER: Berkeley Systems
CONTACT: 510-540-5535; http://www.berksys.com
PRICE: $30 (street)
REQUIREMENTS: 68040 or better or PowerPC, System 7.1 or later, 5MB of RAM, 30MB of hard disk space, 256 colors or better, additional 500K for each additional online display, 14.4Kbps modem or better

Does the modern world need a screen saver at all? In the olden days, there was such a thing as phosphor burn; a screen that was left on would develop ghostly tracks from a burned-in image. Nowadays, monitors are built so that just doesn't happen any more. Why should we want After Dark?

Berkeley Systems knows the situation all too well. After Dark 4.0 updates old favorites, such as the flying-toaster-flock and the fishies (now impressively 3D), and adds on over 20 new modules. On top of this, however, After Dark tries to become a useful part of your computer. There's a security password feature, a WallZapper™ to make desktop patterns, and EcoLogic™, which can turn off Energy Star™ compliant monitors or even computers. At first we wondered why a screen saver would need an energy saver on top of it, but that was just small thinking.



FINISH HIM! It has no redeeming social value, but this Mortal Kombat-meets-schoolyard game is just sooo cool...

Installation is quick and easy. After Dark also automatically configures third party modules into a separate folder, which can be chosen through the AD Control Panel (accessible from the Apple Menu).

There's no doubt about it: these things are fun. Some are just eye candy, but a few are really entertainment. Rock Paper Scissors was our flat-out favorite. Personality and great 3D work went into the characters, their movements, and the whole killer-move choreography. Shareware game fans will love Roger Dodger, a Crystal-Quest-like game which runs as a screen saver until you hit the "Caps Lock" key. There's also the Magic Turtle module, which is at heart a programming tutorial based on what looks like the old Logo language.

But the actual utility part of After Dark 4.0 is After Dark Online. These "channels" give you front ends for a number of online content providers, such as "The Wall Street Journal" and "USA Today." You can customize which sections of each publication you'd care to see. The Updater runs periodically in the background, so the info you get (including ticker-like sports scores or stock prices) is super-fresh.

Ultimately, the world doesn't *need* a screen saver. However, for the entertainment value, and the actual information utility provided by the Online module, you may want After Dark 4.0. After all, for this price, you could have had to sit through a bad dinner and a Steven Segal double-feature. —*D. D. Turner*



GOOD NEWS: Highly amusing, in parts. Easy to install, and configuring takes next to no time. Actual value from Online module.
BAD NEWS: Modules contain dross as well as gold. There really is no point to some of this (or is that Good News?).



BAD Day On The WEB

?

The internet can be so cruel. One day you're golden – the bounty of the global village at your feet. The next day you have to slog painfully through page after page of dross hunting for information that's somehow disappeared. This will not do. Put an end to that static with Web Quick™, the elegant little 'smart bookmark' utility with automatic tracking. Web Quick makes sure if you found a page once, you can easily find it again.

WebQuick

www.europasoftware.com/spider

One spider was harmed in the making of this ad.

cd-roms

MONTY PYTHON ■ A.D.A.M. 1997 ■ INSIDE INDEPENDENCE DAY ■ MULTIMEDIA GUNS ■ DEVO PRESENTS ADVENTURES OF THE SMART PATROL

What a bipolar month. Either the CD-ROMs bordered on greatness, or they just plain sucked. Monty Python made us laugh. Devo made us cry. Our friends at Fox did a decent job of making a CD about a movie, while our gun-loving pals really missed the target with their primer on firearms. Don't shell out (no pun intended, really) your hard-earned money before checking out what our reviewers had to say about this month's selection of CD-ROMs. —*Joe Mahr*

Monty Python and the Quest for the Holy Grail

PUBLISHER: 7th Level
CONTACT: 800-884-8863; http://www.7thlevel.com
PRICE: $49.95 (srp)
REQUIREMENTS: 2X CD-ROM, System 7.1 or later, 33MHz 68040 or better, 12MB of RAM

Totally senseless, this CD pulls off classic Monty Python comedy in true screwball form. Although it can be a pain to get past the little tricks the Python troupe has set up for game players (such as the beginning, but we won't spoil the frustration), Python fans will surely find fun in the game's off-beat gags.

The quest, of course, is to find the Holy Grail, à la the movie. Lest the quest prove tiresome you can always entertain yourself along the way with simple games such as "Spank the Virgin" and "Burn the Witch," which are also based on the comedy. Movie clips for Monty virgins are also spliced into the game, so pretty much anyone can follow along.

Warning: If you've never found British humor funny, this quest may prove too Python for your taste. The games get old—one is just glorified Tetris. The little tricks can grow tiresome too. True Python fans, however, will find this waste of time more than worthwhile.



BURN THE WITCH, spank the virgin, buy the CD.

The Last Words:

Judy: A gem for true Monty Python lovers even if the interface is difficult, the directions unclear, and the interactive game action repetitive.

Mark: Every now and then it crosses the fine line separating fiendishly cunning from impossibly difficult, but overall this witty and inventive CD is within spitting distance of greatness.

Joe: Comedians, not technoweenies, shaped this game, and that's the reason it's so funny.

A.D.A.M. The Inside Story: 1997

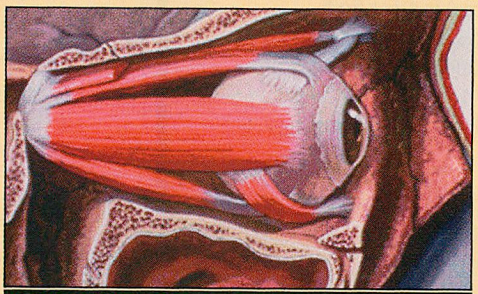
PUBLISHER: A.D.A.M. Software
CONTACT: 800-955-9920; http://www.adam.com
PRICE: $39.95 (street)
REQUIREMENTS: 2X CD-ROM, System 7.1 or later, 25MHz 68040 or better, 8MB of RAM

Want to see how your love pump keeps the beat? Or perhaps what it looks like after one too many cheese and mayo sandwiches? How about the ensuing emergency operation? A.D.A.M. The Inside Story will show you your insides in action through classy QuickTime illustrations and Cybervizz 3D, a whizzy new way of viewing 3D models.

Those looking for insight to our inner workings will appreciate the clear and comprehensive explanations of our 12 body systems. From lungs to nerves, you'll get those high school physiology lessons again, except this time it won't be through a dry textbook.

Researchers dissected a cadaver into 1,800 pieces, photographed the pieces and transferred the images to computers to get a true idea of anatomy. A.D.A.M. used the data to create basic models of the skull, heart, and lungs which you can view inside and out.

Cool, but we want more. Unfortunately, the disc doesn't delve much beyond the basics. There's no information about most diseases, nary even a mention of cancer. And the search engine is clunky, offering hits on only heads and subheads.



BODY OF EVIDENCE lacks depth, but looks bloody good.

The Last Words:

Judy: Thoroughly researched, detailed, and navigated, A.D.A.M. (or Eve) is a super asset to anyone's library.

Mark: Overall, the A.D.A.M. package is sadly ho-hum. The Inside Story portion is a simple slide show of human anatomy. I had high hopes for the 3D section, but it was no less cheesy.

Joe: The information and illustrations left me giddy (like the movie of surgeons pulling out a Slim Jim-sized blockage from a heart artery). But, with only superficial information, the CD left me starved for something more (strangely enough, just like a Slim Jim).

Inside Independence Day

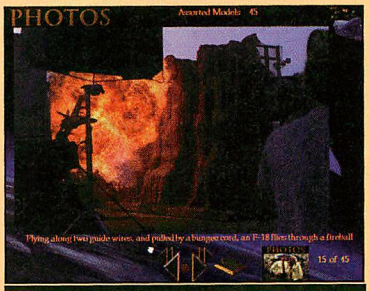


PUBLISHER: Fox Interactive
CONTACT: http://www.foxinteractive.com
PRICE: $19.98 (srp)
REQUIREMENTS: 2X CD-ROM, System 7.1 or later, 25MHz 68030 or better, 8MB of RAM

Despite the hype that surrounded the film like a big, evil, alien invasion, we couldn't help but take a shine to Independence Day's CD-ROM offspring. The disc provides a fat overview of the film's creation using clips, cast interviews, cast and crew biographies, and storyboards detailing the earth-shattering (literally) special events. A simple interface makes jumping back and forth between all these goodies hassle-free.

In addition to the behind-the-scenes peeks, you get a lesson on UFO history that's at least as interesting as the movie, although it could use some research. While explaining the theory behind a secret government hush-up of UFO sightings, the disc mentions "a 1952 White House memo to President-elect Truman." Of course, in 1952, Truman was on his way out of office to make room for Ike. Tsk, tsk.

The Preferences screen does, however, indulge in some gratuitous Mac evangelism. A bogus Mac OS 8 interface offers the sweet comment: "Some might say that, if you're going to save the world, you should use the right computer." But don't start believing they're Mac-eriffic. In the manual, Fox eagerly mentions an upcoming game based on the movie, available soon for Windows 95—only.



A CREATION TALE that's out of this world.

The Last Words:

Judy: If you loved the movie, you'll love the CD. If you didn't see the movie (like me), you'll still find it relatively interesting.

Mark: Now this is a movie backgrounder done right—all in all a lavish and thorough production. I'd rate it even higher if all this effort were devoted to a more intrinsically interesting movie.

Joe: Smooth ride, so long as you can stomach all that movie machismo.

Multimedia Guns: The Enthusiast's Guide to Firearms

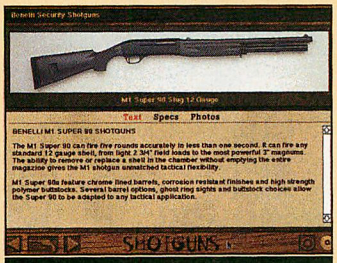


PUBLISHER: Inroads Interactive
CONTACT: 888-INROADS; http://www.inroadsint.com
PRICE: $59.95 (srp)
REQUIREMENTS: System 6.07 or later, 4MB of RAM

Don't draw your wallet, partner. This CD only shoots blanks.

From the looks of the title's lame content, the developers apparently spent a few days at the library, typed in a few paragraphs on each gun, gathered up some pictures and coughed up their version of "multimedia." The cheap documentary footage and simplistic articles don't even do "Guns & Ammo" justice.

The "Legends of the West" section is particularly lifeless. Click on nine old photos of great Wild West places and personalities and a very short biography (emphasis here on the word "short") appears. "Doc Holiday visited a lot of boom towns and died at age 36 of alcoholism and tuberculosis." You could find more info in most B-grade westerns.



THIS SMOKING GUN simply stinks.

The disc's best shots are its six QuickTime movies, which were apparently borrowed from other sources. (Wouldn't want to have an original thought now, would we?) While most of the movies offer tips on sport shooting, one short clip appears to be a blatant gun shell advertisement. Hmm.

The Last Words:

Judy: The infrastructure is so basic it's embarrassing, movement is sticky, background is totally unsophisticated, and tabletops and notebooks have been done to death.

Mark: Wow, talk about shovelware. A quick-'n'-dirty CD-ROM about firearms.

Joe: Emphasis on "dirty." Make it go away.

Devo Presents Adventures of the Smart Patrol



PUBLISHER: Inscape
CONTACT: 800-741-3043; http://www.inscape.com
PRICE: $39.95 (srp)
REQUIREMENTS: 2X CD-ROM, System 7.1 or later, 33MHz 68030 or better, 8MB of RAM (16 recommended)

Sure, they were sort of fun with their little music video hit "Whip It," back in 1980. But any revived interest in this too-trendy '80s band quickly turns to annoyance with their latest Devo-stration.

The object of the game is to help Devo, aka the Smart Patrol, solve the mystery of a mutant beast called the "turkey monkey" before Earth falls prey to a terrible disease. Along the way, you have to deal with pesky, money-grubbing corporations.

Inscape promotes the game as a "surrealistic "Blade Runner"-on-steroids urban wasteland where disease means profit." OK, whatever. But the game's navigation is horrendous and the plot is difficult to follow. You must guess at passwords, fumble with the control bar, and continually swipe a money card through a machine to drive your Devo-mobile anywhere. We didn't get too far.

There are supposed to be two new Devo songs and some old ones included on the disc. We didn't really look for them.



NOTHING TO WHIP HERE, if you catch our drift.

The Last Words:

Judy: This disc is a producer's overindulgence into frustration, irritability, and stupidity. In fact, nothing is clear. Dumb. Dumb. Dumb. I quit.

Mark: I was really looking forward to seeing what kind of weirdness the Devo gang had come up with, but packaging this as a game is really obnoxious.

Joe: You should almost buy the game to hear the pathetic character dialogue. Almost.

Kidz Stuff

Brisbane Elementary School MacAddicts share their views on the latest kids' software.

Nick Jr. Play Math!

PUBLISHER: Viacom
CONTACT: 800-469-2539; http://www.viacomnewmedia.com
PRICE: $24.99 (street); $19.99 if ordered from 800 number
REQUIREMENTS: 2X CD-ROM, System 7.1 or later, 33MHz 68040 or better, 4MB of RAM



NICK MISHAP is more like a nouveau flop than a math classic.

Little kids love repetition, so they might not mind Clickle, the annoying host of Play Math. Your youngest youngsters may actually have fun as they learn to distinguish shapes, add and subtract, and use their problem-solving skills via a slew of cartoony games. They may even learn to love the babyish, garbled voices of the silly characters. Or, they may not. Parents, cross your fingers.

GOOD FOR GRADES: Preschool to 2

LIKES: "I like how there were different characters to teach math to kids so kids don't get bored." ■ Carl

"I liked how it didn't just do regular math—it was fun math with no numbers." ■ Lena

DISLIKES: "It got boring fast and the voices were hard to understand." ■ Kathleen

"The games run very slow." ■ Rockson

SOUND ADVICE: "Make the characters speak clearer and say different things." ■ Ana

FINAL REPORT: Much less fun than a barrel of monkeys.

Meet the players...



ROCKSON YAN, Age 11, Grade 6
Expertise: Computers
Pick of the month: Highlights Puzzlemania



CARL LAM, Age 11, Grade 6
Expertise: Math
Pick of the month: Nick Jr. Play Math!



ANA RUDOLPH, Age 12, Grade 7
Expertise: Reading, swimming, and conflict management
Pick of the month: Paint, Write & Play!



ARIELLE REISMAN, Age 11, Grade 6
Expertise: Dancing and Science
Pick of the month: Highlights Puzzlemania



SEAN MCKNIGHT, Age 12, Grade 7
Expertise: Soccer
Pick of the month: Highlights Puzzlemania



KATHLEEN MARIE MCKNIGHT, Age 11, Grade 6
Expertise: Nature and naming things
Pick of the month: Highlights Puzzlemania



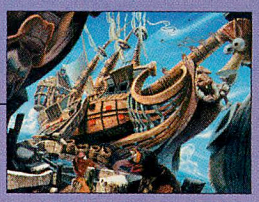
LENA RUDOLPH, Age 10, Grade 6
Expertise: Piano
Pick of the month: Highlights Puzzlemania



KRYSTAL WHITE, Age 11, Grade 6
Expertise: Art
Pick of the month: Muppet Treasure Island

Muppet Treasure Island

PUBLISHER: Activision
CONTACT: 800-477-3650; http://www.activision.com
PRICE: $49 (srp)
REQUIREMENTS: 2X CD-ROM, System 7.5.1 or later, 33MHz 68LC040 or better, 16MB of RAM



MUPPET REVISION washes ashore a true gem.

Muppet Treasure Island is more than just a cute kid's movie. Now, it's a fully-loaded, graphics-intensive, 3-disc adventure through four stunning worlds over-populated with America's favorite stuffed puppets. Kermit runs the show, Fozzie Bear tells bad jokes, and talking rats pop in and out like crazy neighbors throughout the length of this epic treasure hunt. You throw pies at pirates, complete your sailor's chores, and solve puzzles in your search. Although it's a delightful blast from the past for adults, kids may get a little bored at some of the drawn-out video sequences and pokey gameplay.

GOOD FOR GRADES: 2 to 5

LIKES: "Throwing pies at the pirate and playing the piano because I like to play the piano." ■ Rockson

"I liked the characters because they were funny and just like the real Muppet babies." ■ Lena

"It was just like the movie, so if you liked the movie, then you'll love this." ■ Ana

DISLIKES: "Some parts were boring and annoying. There were long pauses where a younger kid might get bored." ■ Kathleen

"The game was kind of slow." ■ Arielle

SOUND ADVICE: "Make the objects move faster and make it go faster when you go into a different room." ■ Ana

FINAL REPORT: Slow gameplay proves that looks aren't everything.

Mighty Math Carnival Countdown

PUBLISHER: Edmark
CONTACT: 800-691-2985; http://www.edmark.com
PRICE: $39 (street)
REQUIREMENTS: 2X CD-ROM, System 7.0.1 or later, 25MHz 68030 or better, 8MB of RAM



MIGHTY KIDDIE math carnival falls a few clowns short of a fully loaded car.

Clown around with preschool math in this carnival classroom atmosphere that has kids weighing laughs on a scale in the Giggle Factory and blowing bubbles in groups of ones, tens and hundreds from purple monster-machines. This brand of circus-style math teaches very young kids the building blocks of math and logical thinking in true kid form. Although you can adjust the Bubble Band Grow Slide to change the topic and level of difficulty for each game, there just aren't enough acts in the ring to keep the show alive.

GOOD FOR GRADES: K to 2

LIKES: "I like the music because it fits in with the circus. I also like the graphics because they are good cartoons." ■ Arielle

"You could change the difficulty of the game by moving a knob. They start out very easy, then you can make them difficult." ■ Krystal

DISLIKES: "This program had terrible voices, bad colors, was boring and I would not recommend it." ■ Kathleen

"The games are boring for nine and older kids." ■ Rockson

SOUND ADVICE: "Make a harder version for older kids and make more games." ■ Ana

FINAL REPORT: This three-ring circus could use a few sideshows.

Paint, Write & Play!

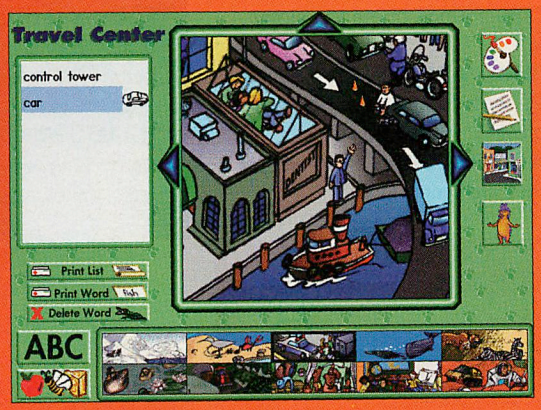
PUBLISHER: The Learning Company
CONTACT: 800-227-5609; http://www.learningco.com
PRICE: $40 (street)
REQUIREMENTS: 2X CD-ROM, System 7.0.1 or later, 33MHz 68030 or better, 8MB of RAM

Paint, Write & Play! lets your kids do just that—for hours. This preschool publishing guide gets kids involved in all aspects of the creative business. A brief stint in the Art Studio has kids fiddling with over 48 colors, clip art, patterned fills, and a selection of pre-designed backgrounds. These colorful visions become stories in the Writing House where kids choose from an ABC selection of commonly used words or just wing it on their own, while a trip to the Travel Center offers a whole new vocabulary encountered in exotic locales. The only drawback is the helpless hedgehog guide who doesn't really offer much direction to struggling artists.

GOOD FOR GRADES: K to 4

LIKES: "It had a lot of options, like when you were in the Art shop, you got a lot of choices for art supplies." ■ Krystal

"You can always quit. There's regular, light, or dark colors to choose from and you can type in what your picture says and make cool books." ■ Ana



FREE-FORM WORKSHOP inspires aspiring artists to finally start that book they've been meaning to get to all these years.

"It's lots of fun to play. There are a lot of icons like animals, cars, and dinosaurs to choose from." ■ Sean

DISLIKES: "The pasting pictures are too little and it needs a CD to run with it." ■ Rockson

"I didn't like how it would freeze if you went on screen saver and came back to the game." ■ Lena

SOUND ADVICE: "I would add more information to the Travel Center." ■ Kathleen

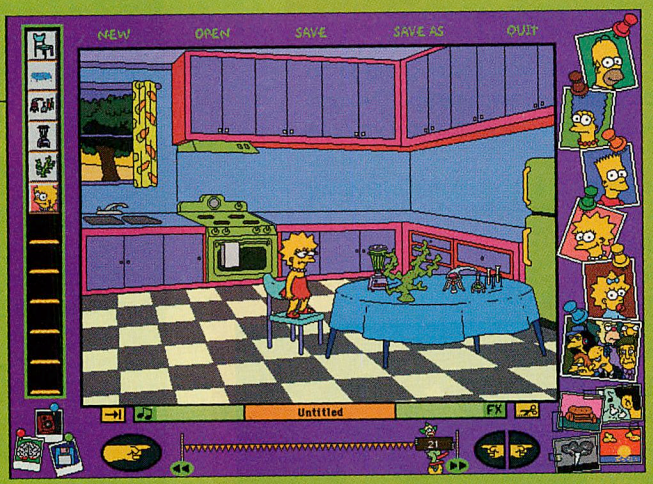
FINAL REPORT: Hedgehog lacks direction, but kids enjoy the busy work.

The Simpsons Cartoon Studio

PUBLISHER: Fox Interactive
CONTACT: http://www.foxinteractive.com
PRICE: $39.98 (srp)
REQUIREMENTS: 2X CD-ROM, System 7.0 or later, 33MHz 68030 or better, 8MB of RAM

The Simpson's Cartoon Studio lets you create your own Homer-bilia by handing you the characters, backgrounds, props, and sound effects necessary to develop your own 'toon. The entire town of Springfield is at your disposal as you master the ins and outs of creating an animated short. Though half the fun of creating anything is the process of getting there, it's hard to get anywhere with this title's lack of any onscreen tutorial or help functions.

GOOD FOR GRADES: 4 and up



MORE FUN THAN a day full of free, chocolate-covered, cream-filled donuts.

LIKES: "I liked how there was all the main characters from the real Simpsons show to choose from." ■ Carl

"I liked it because it was just like the Simpsons and I love the Simpsons." ■ Lena

"Some of the things the characters did, along with the backgrounds and music, made it very entertaining." ■ Krystal

DISLIKES: "It didn't give you enough directions." ■ Lena

"I couldn't find out how you made the people move from one place to another. If they were walking they would walk in one place, not move from here to there." ■ Krystal

SOUND ADVICE: "Let the characters talk." ■ Carl

FINAL REPORT: Playing with dolls was never this fun.

Highlights Puzzlemania

PUBLISHER: Graphix Zone
CONTACT: 800-828-3838; http://www.gzone.com
PRICE: $39.95 (srp)
REQUIREMENTS: 2X CD-ROM, System 7.0 or later, 68040 or better, 5MB of RAM

Finally, the clever collection of puzzles, riddles, and games that used to make waiting for your dentist almost fun, has come to your computer. Highlights Puzzlemania is a joyous collection of math mazes, photo scrambles, hidden pictures, secret codes, and classic "what's different" puzzles that will send parents into fits of nostalgia while keeping kids thoroughly entertained. More than 100 games and puzzles come complete with catchy music and cute animations.

GOOD FOR GRADES: K to 4

LIKES: "I liked the different games because you are kept interested. I liked the music because it was different each game." ■ Arielle

"You never got bored. The hidden object puzzle was fun because it was easy to do at first and then it got harder and harder." ■ Krystal

DISLIKES: "Nothing." ■ Rockson, Arielle, Lena

"The sounds come too slow." ■ Ana

SOUND ADVICE: "The whole thing was fun! It did not need improving." ■ Kathleen

FINAL REPORT: These simple games are simply fun.



NOSTALGIC COLLECTION of games is puzzle perfect even today.

American Heritage Children's Dictionary

PUBLISHER: Houghton-Mifflin Interactive
CONTACT: 800-829-7962; http://www.hminet.com
PRICE: $39.95 (srp)
REQUIREMENTS: 2X CD-ROM, System 7.0 or later, 25MHz 68LC040 or better, 8MB of RAM for 68LC040, 12MB of RAM for PowerPC

Word for word, this digital dictionary beats out the competition. Click on any letter from A to Z and up pops a screen that is loaded with words and illustrated by colorful drawings and animations that wiggle, whirl, growl, and throw their voices. Word Finder lets you search among the 37,000 entries, the Word Wheel offers up related words, and Word Detective supplies fun facts. For a little wordplay, try your hand at charades, hangman, or a spelling bee.

GOOD FOR GRADES: 2 to 5

LIKES: "It has pictures, so if you are trying to look up a word a picture will pop up." ■ Carl

"The games are fun to play and the definitions are easy to understand." ■ Rockson

DISLIKES: "Well, it's a dictionary and who likes dictionaries?" ■ Krystal

"It wasn't really my age." ■ Lena

SOUND ADVICE: "Make more things that make noises and move." ■ Ana

FINAL REPORT: Wordy, but pleasantly useful nonetheless.

YOU'LL HANG ON its every animated word.



Freddi Fish 2: The Case of the Haunted Schoolhouse

PUBLISHER: Humongous Entertainment
CONTACT: 800-499-8386; http://www.humongous.com
PRICE: $39.95 (street)
REQUIREMENTS: 2X CD-ROM, System 7.0 or later, 25MHz 68040 or better, 8MB of RAM

An evil ghost has robbed the school's guppies of all their toys which means that you have to help Freddi Fish and his sidekick, Luther, get the stolen goods back. This beautifully illustrated, Little Mermaid-like adventure leads you on a quest through sunken ships and the lost island of Atlantis as you search for the trap-making tools you'll need to snare the greedy ghost. Along the way, you can stop to play games or sing songs with some friendly sea folk.

GOOD FOR GRADES: 1 to 5

LIKES: "It had you always thinking about what you're going to do next and how to figure out each problem that you come upon." ■ Krystal "I like how you have control over the fishes. I also like how you can go wherever you want." ■ Carl

DISLIKES: "In the classroom the people talk too long and everything has to play an annoying song." ■ Sean

"The storyline was about a ghost stealing the children's toys and it was a horrible storyline. Put a twist in the plot." ■ Kathleen

SOUND ADVICE:

"The game does a lot for you. I think you should be able to do more." ■ Krystal

FINAL REPORT: A Disney wannabe that comes darn close.

SCALED-DOWN FISH TALE manages to maintain its mystery in deep water.



What the Adults Thought

It just goes to show that familiarity breeds... popularity. Although billed as a title for kids aged six to adult, The Simpsons Cartoon Studio had the MacAddict staffers calling dibs the instant it was torn from the box. This outburst of adult love, combined with the title's lack of onscreen direction, tutorial, or help functions, made it unclear whether the Cartoon Studio was more appropriate for our adult's inner child, or the children themselves.

But, kids seem to love a challenge. In fact, one of their biggest complaints is that there's a shortage of smart software for older kids who demand more difficult programs. One of our 12-year-old readers, Keenan M. Crane, wrote, "I am a kid, but I know that I wouldn't enjoy any of those games with their bad fruit salad interfaces. I'm not a blood-thirsty DOOM player either, and I would much sooner use Windows 95 than play these games any day." Ouch. If any other readers find the Kidz Section as "offensive and degrading" as our budding young programmer, please let us know what you would like to see in the stores. We'll pass along the word to the people who actually make the titles.

By the way, both the kids and adults loved The Simpsons Cartoon Studio. Cowabunga, dude.

TOP 10 WAYS TO KNOW YOU'RE A Mac Addict

10. Your 486 works great—as a flower press

9. You constantly double-click the bar of soap in the shower

8. You talk in a wild, animated manner about new "extensions" and "peripherals"

7. You can't resist the urge to use "Command Y" to eject your Pop-Tarts from the toaster

6. You wish this was a "Top Five" list so you could get back to your Mac sooner

5. You read "Inside Macintosh" to your three-year old Mac whiz instead of Dr. Seuss

4. You turn on the TV and are concerned when you don't see a smiling icon

3. You paid $150 for an old Homestead High School yearbook picturing Stephen Wozniak

2. You are always telling people you can quit using your Mac anytime you want to...



And The #1 Way To Know You're a Mac Addict?

THERE'S A PUBLICATION CALLED MACADDICT AND YOU MUST HAVE IT!

Call 1-888-4IMAGINE and start your subscription to *MacAddict* today! You'll receive 12 issues and 12 discs for only $29.95—a savings of over 65% off the cover price. And don't forget to check out our equally addicting Web site at:

http://www.macaddict.com

Mac ADDICT

A better machine. A better magazine.

imagine PUBLISHING

5AAF9

how to

how to create macros

Why do stuff yourself, when your Mac can do it for you?

Ease of use is the hallmark of the Mac interface, but when it comes to accomplishing repetitive chores, its graphic interface can actually get in the way. Fortunately, there is a wide array of powerful Mac-only software—from simple text-entry programs such as the shareware TypeIt4Me to the powerful system-level scripting of the free Userland Frontier—ready to serve you. At their core, programs like these help automate tasks you need to perform over and over again.

The two most general-purpose automation programs are CE Sotware's QuicKeys (800-523-7638) and WestCode Software's OneClick (619-487-9200). For most of its automations, QuicKeys relies on manually activating key parts of the Mac OS' interface, including scroll bars, dialog box buttons, mouse clicks, and menus. These are combined into sequences that QuicKeys processes in order. In contrast, OneClick uses a scripting language, called EasyScript, that is optimized for use with its button palettes. OneClick's button creation tools are far more flexible than QuicKeys', but for basic commands, new users may find QuicKeys easier. A promising new challenger to both programs is Binary Software's KeyQuencer (310-449-1481), a lean package that can carry out instructions on remote Macs. KeyQuencer was available originally as shareware; the 2.0 version is a commercial offering.

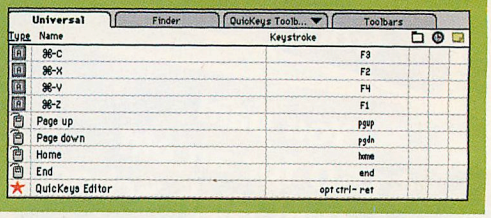
If you'd like to get some hands-on time at what it takes to get hands-off, then check out this tutorial for applying QuicKeys 3.5 and OneClick 1.02 to two different automation tasks. Go forth and automate! —*Ross Scott Rubin*

Switch Color Depth

Ever encounter one of those fussy old games that isn't hip to monitors displaying more than 256 colors? With QuicKeys, you can create smart "alias" type icons that, when you double-click them, automatically switch your monitor's color depth and then launch the game.

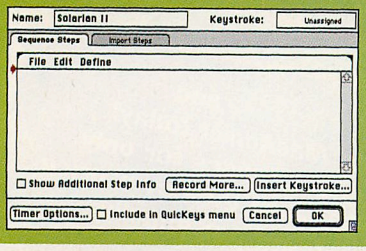
STEP 1

Choose QuicKeys from the QuicKeys system menu. The QuicKeys editor appears. The system menu, new to QuicKeys 3.5, provides convenient access to various QuicKeys palettes and lets you show and hide the toolbars it can create.



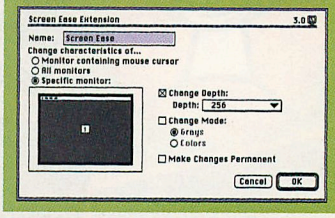
STEP 2

Choose Sequence from the Define menu. This causes QuicKeys 3.5's revised Sequence editor to appear. Sequences are QuicKeys' way of stringing together commands to accomplish multiple tasks with a single keystroke. Now type a name for your sequence. It should be something descriptive; we'll use Solarian II (a game) as an example. If you run out of room in the name field, you can add more text in the comment field.



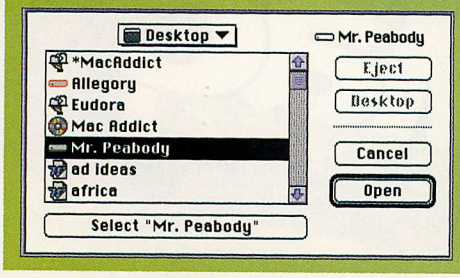
STEP 3

From the Extensions menu in the Define menu, choose Screen Ease. Screen Ease is a special QuicKeys extension that allows you to automate Mac features without having to manually step through them, as you would with a menu or mouse click. Click the Change Depth check box to change color depth. Then set the color depth to 256 colors and click OK. This will change the screen to 8-bit color regardless of the current monitor setting. Screen Ease becomes the first step in the sequence.



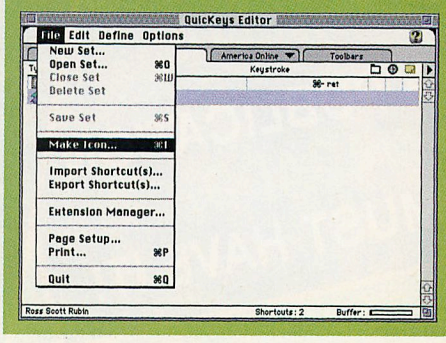
STEP 4

Choose File Launch from the Define menu. A standard Open dialog appears in which you can pick the name of the game that you want to launch. In the standard Open dialog box, select the application and click the Select button at the bottom of the dialog box. You're now done with your sequence. Click OK in the Sequence editor. This saves the sequence.



STEP 5

As a last step, select the sequence in QuicKeys' shortcut list (in the QuicKeys Editor) and choose Make Icon... from the File menu. This will let you save your shortcut as a double-clickable program. You can even copy a custom icon onto it!

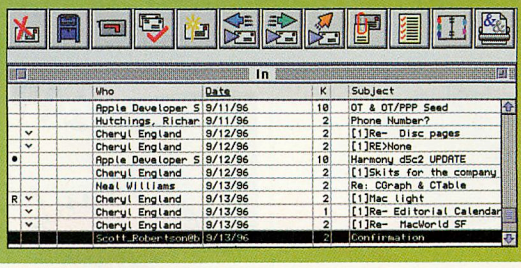


Automatic Signatures

Nowadays, many e-mail programs support signatures, little tag lines that often have personal information or a quote. But no one says you have to sign all your e-mails the same way! With OneClick, you can create a small palette that lets you insert signatures with the click of a button.

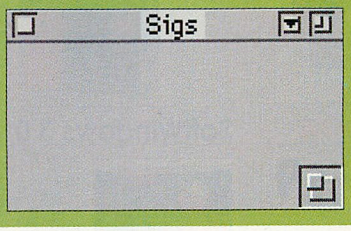
STEP 1

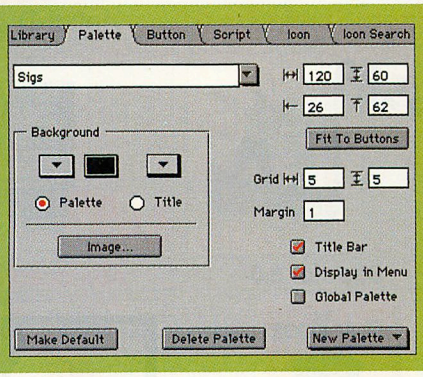
Open your e-mail program. Unlike QuicKeys, most of OneClick's work does not require you to interact with the "host" program since OneClick relies on a simple scripting language that we'll tackle later. However, having your e-mail program open helps you define whether a palette should be application-specific or open in any application.



STEP 2

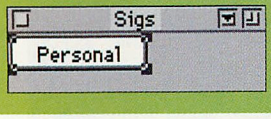
Choose OneClick Editor from OneClick's system menu. The OneClick Editor allows you to interact with and edit any button palettes. Be careful as you experiment with other palettes, though. The window title bars and close boxes are actually just OneClick buttons and they're editable when the OneClick Editor is open! Click the Palette tab. Go to the New Palette pop-up menu and choose New Application Palette. A small gray rectangle appears (near right). This will be the floating space in which you'll create your buttons. Name the palette "Sigs". Note that it becomes the title of the palette.

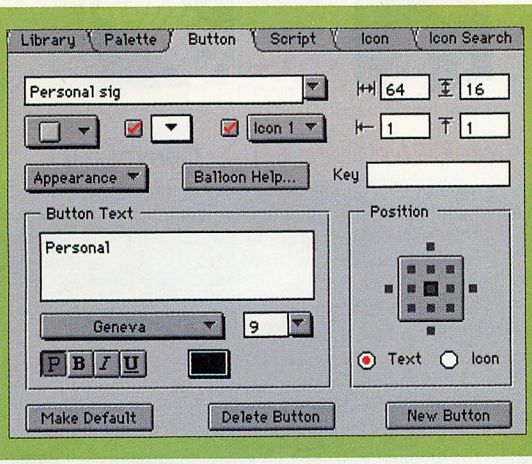




STEP 3

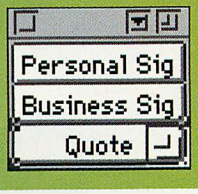
Click the Button tab and then click New Button and name it "Personal Sig". Set the width to 64 and type "Personal Sig" in the Button Text field. Repeat this for two more buttons, calling them "Business Sig" and "Quote".

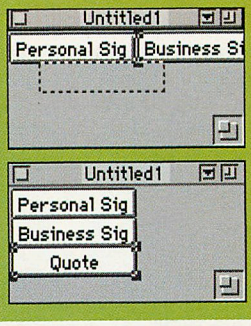




STEP 4

Move the buttons around the palette so that they line up. When they are aligned, click the Palette tab and click the Fit to Buttons button. This causes the palette to be resized so that it fits exactly around the buttons.

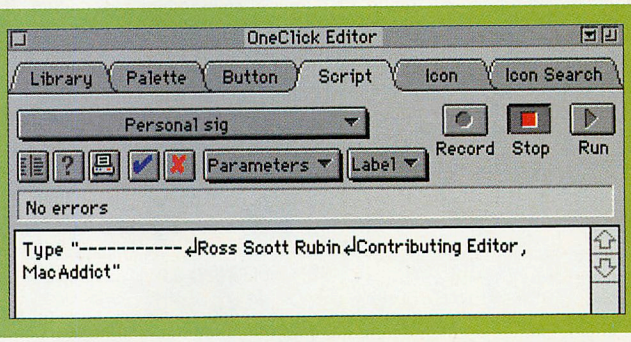




STEP 5

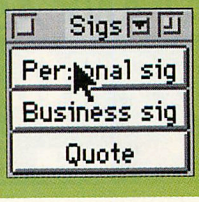
Now you need to simply type in your quotes for each button. For each button in the palette, click the button and click the Script tab. In the text entry, type the word "type" (no quotes) and put your signature in quotes. You can create a new line in the signature by holding down the Option key as you press Return. You can also make an icon for each button by designing one with the editor in the Icon tab.

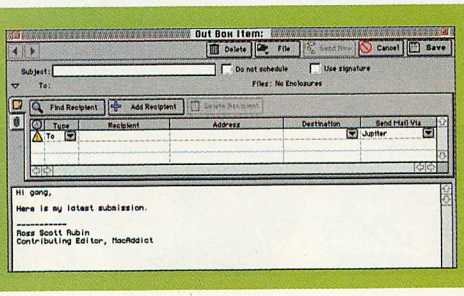




STEP 6

Close the OneClick Editor by clicking in its close box. The signature palette should now work. Clicking the appropriate button will quickly import your signature in the bottom of any e-mail message. By going back to the OneClick Editor, you can make the sig palette a global palette, which means your favorite signature will only be one click away.





Student - Teacher - School Discounts!!

LATEST VERSIONS & FULL PACKAGES



$429

Strata Studio Pro 2.0



$249

Free Video

Infini-D 3.5



$119

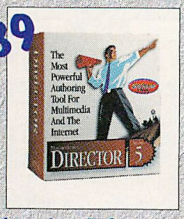
KPT Bryce 2.0



$169

Freehand 5.5

Place any order and receive a chance to win $100 Software Source Gift Certificate



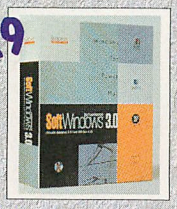
$589

Director 5.0



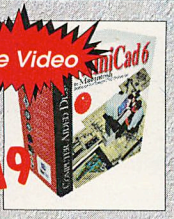
$699

Authorware 3.5



$229

SoftWindows 3.0



Free Video

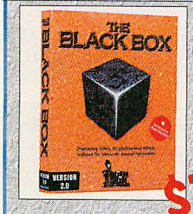
$319

Minicad 6.01



$219

Fractal Painter 4.0



$75

The Black Box 2.0b



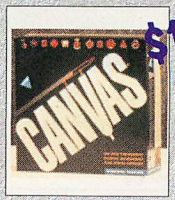
$129

Filemaker Pro 3.0



CALL

CorelDRAW Suite 6.0



$179

Canvas 5.0



$285

Wacom ArtZ II 6x8

Alias Sketch! 2.0.2	$229	Empower Pro	$110	KPT Vector Effects 1.0	$85	Presenter Professional 3.1.5	$895
ArchiCad 5.0 Student	$475	Encore 4.1.1	$249	Kai's Power Goo 1.0	$49	Quickeys 3.5	$85
Astound 2.0	$99	EndNote Plus 2.1	$165	Kai's Power Tools 3.0.2	$85	Ram Doubler 2.0	$55
Autocad R12 w/Ame	$199	FastTrack Schedule 4.0	$129	Kidpix Studio	$39	Ray Dream Studio 4.1	$219
Boris Effects 2.0	$125	Final Draft 4.0	$125	Killer Transitions	$189	SPSS 6.1 Student	$99
CD-ROM Toolkit 2.01a	$49	Fontographer 4.1.2	$149	Kodak DC 40 Digital Cam	$649	Sculpt 3D 4.1	$219
ChemOffice Pro 3.5	$299	Form Z 2.8	CALL	LightWave 3D 5.0	$799	SigmaPlot 5.0	$199
Claris HomePage 1.0	$79	Fractal Detailer 1.0	$199	Lightning Draw Gx 1.0	$99	SoftWindows 95	$269
ClarisWorks 4.0	$89	Fractal Expression 1.0	$199	Live Picture 2.5	$469	SoundEdit 16+ Deck II	$269
Cliff Notes Studyware Sat I	$39	Fractal Poser 1.0	$99	Logomotion 2.0	$69	Studio VisionPro 3.0.3	CALL
Coda Finale 3.7	$249	FreeHand Graphic Studio 2.0	$429	M.Y.O.B 6.0	$49	Stylist 1.0	$85
Codewarrior 10 Pro	$129	German Power Translator	$99	Mac Acad Tutorial Videos	$35	SuperCard 2.5 MegaStudio	$249
Collage 2.0.1	$69	Grolier 1997 Mpc Encyclop	$59	MathType 3.1	$99	System 7.5.3 Software	$85
Color It! 3.0	$39	Hard Disk Toolkit 2.0	$109	Mathematica 3.0 Student	$169	TelePort Platinum 28.8	$199
ColorDrive 1.5	$99	HyperCard 2.3.1	$89	Matlab Student	$99	Texturescape 2.0	$79
Conflict Catcher 3 1.0	$59	IdeaFisher Pro 6.0	$75	MediaPaint 1.1.1	$199	TransJammer Vol 1 or 2	$59
CyberPress 1.0	$129	Infini-D 3.5 Production Studio	$379	MediaTool Kit 2.0	$399	Umax Vista-S12 Scanner Pro	$869
CyberSound FX	$85	Infinite Fx	$65	MeshPaint 3D 1.5	$375	Vellum 3D 3.0	$495
Datadesk 5.0	$369	Inspiration 4.1	$89	Mouseman	$69	Virex 5.6.5	$49
Debabelizer Toolbox 1.6.5	$219	Intellihance 2.0.1	$85	Nisus Writer 4.1 w/Lang Key	$149	VirusScan 2.0	$45
DeltaGraph Pro 4.0	$89	Japanese Language Kit 1.2	$129	Now Bundle 3.6	$69	Vision 3.0.3	CALL
Director Multi Studio 2.0	$899	Jmp 3.1.5	$329	Now Utilities 6.5	$55	Wacom Art Z II 12x12	$399
DrawingSlate II 12x12	$215	KPT Final Effects 3.0	$349	OmniPage Pro 6.0	$349	Wacom ArtPad II 4x5 Dabbler	$149

**SAME DAY SHIPPING ON MOST ITEMS.
**ADOBE, SYMANTEC & MICROSOFT PRODUCTS AVAILABLE TO QUALIFIED STUDENTS, TEACHERS & SCHOOLS.
**SCHOOL PURCHASE ORDERS WELCOME.
**NO SURCHARGE ON CREDIT CARDS.
**IBM & MAC PRODUCTS AVAILABLE.

*Prices and availability subject to change.
*Call for details on $100 Gift Certificate giveaway
*Free Video offer ends 12/31/96

Visit our Web Site!!
http://iaswww.com/source.html



CALL FOR FREE CATALOG!!
(800) 289-3275
INCLUDES COMPLETE PRICE LIST & FREE PRODUCT INF..

WE WILL BEAT ANY ADVERTISED PRICE!!

#1 In Education!

1-800-289-3275

DISCOVER VISA MasterCard

The SOFTWARE Source

1750 Brielle Ave, A-2
Ocean NJ 07712
Phone (908) 695-2100
FAX (908) 695-9371
E-MAIL:
SFTSWS@AOL.COM

Command Your Power Mac by Voice — with EZ-Speak!



ONLY $49.95

TAKE YOUR POWER MAC TO THE NEXT LEVEL

Let's face it, you bought your Power Mac because it's fun, easy-to-use and on the cutting edge of technology. EZ-Speak adds a whole new dimension of user-friendliness to your Power Mac. Early voice recognition products were crude, complex devices giving the user limited control over their computer. This is not the case anymore!

EZ-Speak allows you to talk to your Power Mac and have it respond to your voice with a specific action. Yes, you're reading correctly, you actually speak to your Macintosh and it will understand your command.

You can now use voice commands to navigate your way through your favorite programs, inlcuding *Microsoft Word™, Excel™, PowerPoint™, ClarisWorks™* and the Internet. All you have to do is install it and start talking! You don't need to train it. You don't need expensive hardware additions. And best of all you do not need to be a programming guru to get your Power Macintosh to understand your voice.

CLARISWORKS AND MICROSOFT WORD COMMANDS INCLUDED (HERE'S JUST A FEW!)

- ✓ Add Graphic
- ✓ Add Pagebreak
- ✓ Cut, Copy, Paste
- ✓ Select All, Clear All
- ✓ New Document
- ✓ Bold, Italic, Underline
- ✓ Find, Replace
- ✓ Spellcheck
- ✓ New, Save, Save As,
- ✓ Page Setup, Print, Quit

COMMON NETSCAPE COMMANDS INCLUDED (HERE'S A FEW SAMPLES!)

- ✓ Open Netscape
- ✓ Add New Bookmark
- ✓ Page Forward, Page Back
- ✓ General Preferences
- ✓ New Mail Message
- ✓ Print
- ✓ Open Location
- ✓ Open File
- ✓ Select All and Copy
- ✓ Stop Loading
- ✓ Re-load page
- ✓ Quit Netscape

Mention any of 100 subject areas, and EZ-Speak will load a web page relating to what you said. Imagine this: Say "Quality Computers" and the Scantron Quality Computer's Home Page will load. It's EZ.....Speak!

EZ-SPEAK IS RELIABLE & FUN

EZ-Speak is based on Apple's PlainTalk Technology—America's #1 speech technology. EZ-Speak has been thoroughly tested with male and female voices and various dialects to offer unparalleled performance. You'll be hooked before you know it. EZ-Speak features nine different characters that will answer your request when you ask the following questions: What time is it? What is today's date? Tell me a joke.

A DEAL THAT CAN'T BE BEAT

With all it offers, EZ-Speak is surprisingly affordable. You can add the power of EZ-Speak to your Power Mac today for just $49.95 (microphone not included). Offer good for a limited time only. We know you'll love it, and so will your Power Mac!

FOR A LIMITED TIME...

With your purchase of EZ-Speak you can purchase the Apple 16 Bit microphone for only $29.95. Just mention this ad. Offer good while supplies last.

Requirements: Power PC (Power Mac) processor based Macintosh or compatible, 16 MB of RAM, 5 MB of hard drive space,16 bit microphone.

*Apple, ClarisWorks, Power Macintosh, and AppleTalk are registered trademarks of Apple Computer, Inc. Microsoft Word, Excel and PowerPoint are either trademarks or registered trademarks of Microsoft Corporation. Netscape is a trademark of Netscape Communications Corporation.

GIVE YOUR MAC THE ABILITY TO TALK!

Now you can have total speech power for your Macintosh—with MacYack Pro. America's #1 selling speech software that let's your computer talk back to you.

Imagine selecting some text within your favorite program, then pressing a key and hearing your test read back to you—out loud! It contains 8 programs including 21 high quality voices, a talking calculator, SoundMaker, SpeakAlert & much more. MacYack Pro is being offered at the low price of $39.95. This offer ends soon, so place your order today!



ONLY $39.95

MasterCard VISA DISCOVER SCHOOL PO

To order call

1-800-966-1508

mention code: MA3

SCANTRON quality computers

how to

how to get your site online

You've planned, you've created, and you've tweaked. Now it's time to go live.

FIND THE SHAREWARE mentioned on The Disc.

Before anyone can visit your Web pages, you have to make them available by uploading them to your Web host. Your pages will reside on the hard drive of your Web host. For most people, that host is a local dial-up Internet Service Provider or ISP. (If you're using America Online, CompuServe, or another commercial online service as your Web host, you'll have to dig out their specific instructions. On America Online, keyword "HTML" gets you to the right area. As we went to press, though, CompuServe still didn't give Mac users access to its Web page space. If you're hosting a site on your own Mac, you already know far more than I can tell you here.) If your provider gives you FTP access to Web space, read on for how to use it. If not, you'll have to rely on your provider to guide you through the process.

Uploading your Web pages to an ISP is really quite simple, mostly thanks to the sophistication of one of the Internet's most well-designed tools—Jim Matthews' Fetch, a shareware FTP utility. It's mainly known as a fine application for retrieving files from the Internet, but its capabilities go way beyond that simple task. Hidden among the menu choices is a complete set of the commands you need to maintain a simple Web site.

Fetch isn't the only way to get your files to the host, but it is the best. Most Web hosts are Unix machines, and files are stored in DOS-like directories. Fetch does a beautiful job of putting a Mac-like face on that command-line operating system.

Hot Tip:

Ask your provider to pass along its standard instructions for uploading files. You'll need to know things such as your provider's Host Name and the name of the directory for your public Web files.

STEP 1 Perfect Your Site Locally

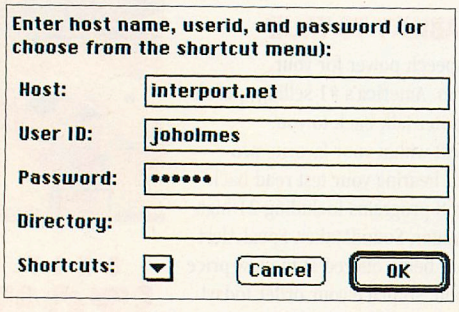
First, check that your Web site runs perfectly from your hard drive. Be sure that the folder hierarchy is set up as you want it (we covered this process earlier). Use your favorite browser to open the site locally. Do all the local links work? Do all the graphics appear?

Now let's go public.

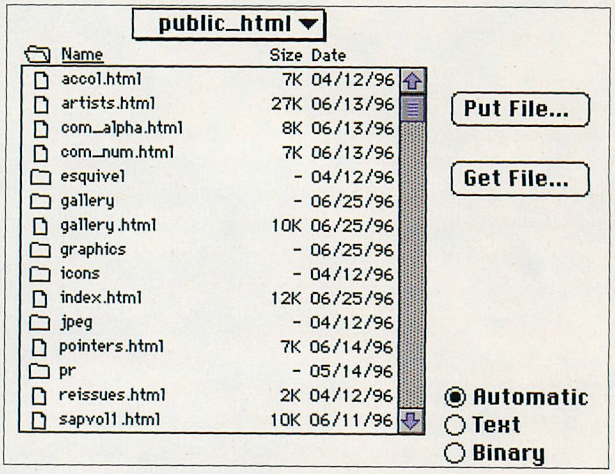
STEP 2 Create the Folder Hierarchy

Now use Fetch to log on to your ISP. Fetch will ask you for the host's URL, your username, and password. Ignore the Directory box.

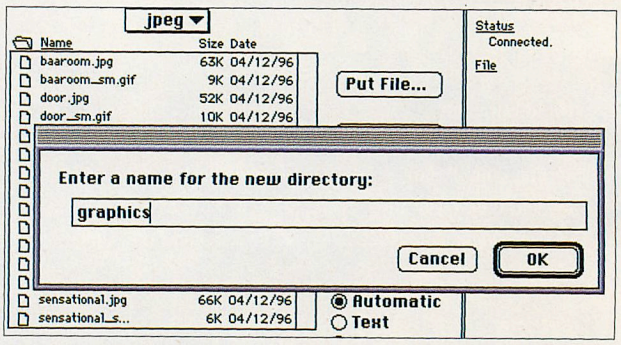
Navigate to the directory that holds public HTML files—your ISP can tell you which one. My Web files, for instance, are kept in a directory called "public_html." I didn't create the directory—there's a "public_ html" directory in all the personal directories on my ISP. Once you've reached your home directory on your Web host, save a bookmark (choose Save Bookmark from the File menu) so you never have to enter all that info again.



FILL IN THE BLANKS in Fetch and you'll be connected with your ISP.



THIS IS FETCH'S WINDOW to the files and directories on your Web host. It works just like the Open and Save dialogs you're used to, except that the folders in this window are actually Unix directories on the remote host.



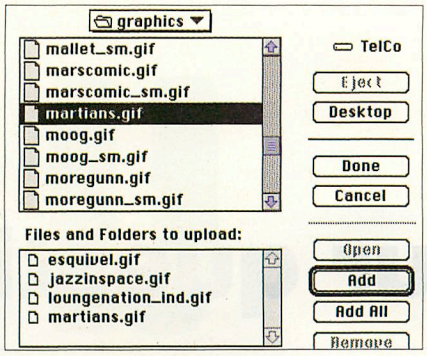
CREATE DIRECTORIES that exactly match the folder hierarchy on your Mac.

Now create a set of directories on the host to exactly mirror the folder structure containing your Web files on your Mac, using the Create New Directories command under the Directories menu. Be sure to put subdirectories inside the right parent directories. Each directory on your ISP must use the exact same name you use on your Mac.

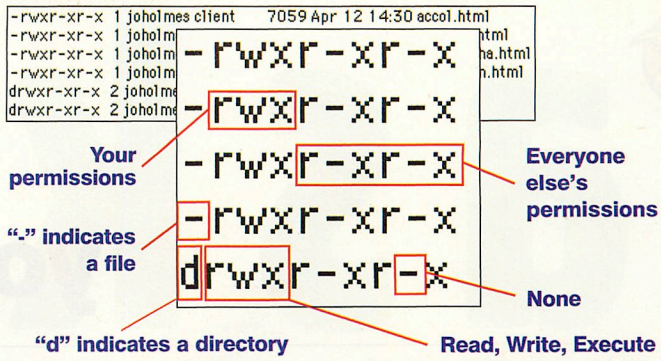
STEP 3 Upload your Files

All files must be uploaded in "Raw Data" format. You can tell Fetch the format every time you upload, or better yet, set the uploading preferences to Raw Data—for both text and non-text files—so that you won't be asked every time. Choose Preferences under the Customize menu to do this.

Now upload the contents of each of the folders of your Web site on your Mac into the corresponding directory on your Web host. Fetch provides two easy ways to do this. You can choose Put Folders and Files from Fetch's Remote menu and then work in a dialog box. But if you're using System 7.5 with its beautiful drag and drop



THIS DIALOG WORKS LIKE THE MAC'S standard Open and Save dialogs, but it lets you select more than one file at a time to upload. The selected files are listed in the bottom window.



capabilities, you can open a directory in Fetch's window, switch to the Finder, open the corresponding Mac folder, and then—get this—drag a group of files right from the Finder into the Fetch window. Try that in Windows 95!

There's only one thing that cannot easily be accomplished with Fetch, and that's copying or moving a file from one directory to another. The workaround for a file move is to simply delete the original and upload a copy to the new location. To copy a file, just upload another copy.

Finally, double-check to be sure you're uploading files into the right directory. As soon as files have been uploaded, you've gone public.

STEP 4 Troubleshooting

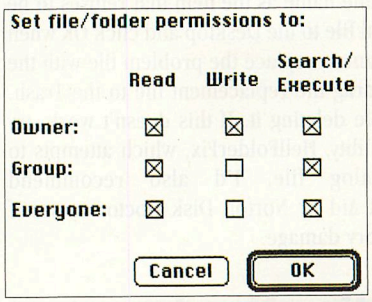
Use your Web browser to check your site. Try every local link. Re-examine every page. You're sure to find some bugs which you can now fix. Re-upload fixed pages. Then try every remote link to be sure there are no typos. (Note: All the links to files within your site should use relative URLs, that is, they should specify only the path within the main Web site folder, like so: <http://graphics/spot> and not the full path on your hard drive, <http://hard_drive/pagemill_files/web_site_folder/graphics/spot>. The former will work fine after uploading; the latter won't. Most Web page writing applications take care of this for you.)

If your browser reports that you don't have permission to see a page, use Fetch's File List command under the Remote Menu to check your files' permissions.

The files' permissions are listed in groups of three: the first three are your own permissions; the second two sets are everyone else's. All files should be "rwxr-xr-x" ("rwx" stands for read, write, and execute) which means "read-write-execute, read-none-execute, read-none-execute," and directories should be "drwxr_xr_x." If that's not what you see, use Fetch's Set Permissions command, under the Remote menu. Select the files that are set incorrectly and give the Owner—that's you—"read," "write," and "search/execute" access. Give Group and Everyone "read" and "search/execute" permission only.

STEP 5 Maintaining Your Site

You'll want to update your site often. When you change a page or a file, just repeat the upload process. If you upload a file to a directory that contains a file by the same name, you'll replace the old file, with no warning. You can delete unneeded files with Fetch's Delete Directory or File command, under the Remote menu. Be careful—if you delete a directory you'll delete all the contents, without any warning.



CORRECT PERMISSIONS PROBLEMS in Fetch's Set Permissions box.

Congratulations, Webmaster. You're online!

—Joseph O. Holmes

Hot Tip:

Once your site is up, you will have a backup of all of your Web files. You can always download a copy of any file using Fetch, or save a page as text with your browser, leaving the HTML tags behind.

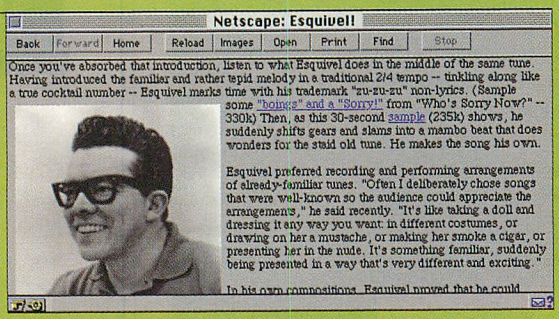
Save Money, Gain Space

Many Internet service providers offer you a home page on the Web as part of the standard $20 or $30 per month account, allotting two to 5MB of space for your pages (though I've heard rumors that some offer as much as 10MB).

But if you have lots of graphics or sound files, it's easy to use all of the allotted space, and additional space is usually pricey. Some ISPs won't even sell additional space—you have to pay $150 or more for a commercial-level account.

Here's a trick to pick up an additional 10MB of space for just $10, and it's available anywhere in the United States. The secret? Join America Online. Each AOL account comes with 10MB of space on AOL's Web server, which is divided into 2MB per screen name.

It's a cinch to use AOL's 10MB as additional space for your existing Web site, no matter where your site is hosted. First, understand that a visitor to your Web page doesn't know or care where individual files are located. Each page and file can reside on widely separated hosts—even continents apart. Click on a link, a file is grabbed from wherever it exists. It's all completely transparent. What this means is that you can keep your small HTML pages on your ISP, and keep up to 10MB of graphics or sounds on America Online.



THESE LINKS TO SOUND FILES look and act just like any other link, but they point to files that are stored on America Online.

Is all this extra hassle really necessary? Consider: My ISP gives me 5MB of space. I have four 30-second sound files, average size 300K—that's more than a megabyte of sound. I offloaded those files onto my AOL space, and linked to them with the AOL URL.

With the extra space, I can add another 25 sound files of similar size. Or I could make my sound files larger by making them stereo, or higher quality. (But watch out for that one—your visitors don't necessarily want to download a files twice the size!)

ask us your questions

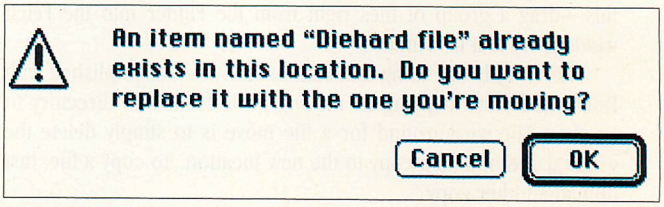
We answer all of your technical questions, no matter how simple or complex.

Q I have what I think is a corrupted file that I am unable to delete. Every time I choose Empty Trash from the Finder's Special menu, an alert box appears saying I can't delete the file because it's locked. However, Get Info shows it to be unlocked, as does ResEdit. I try holding down the Option key while emptying the Trash, but that doesn't work either. How can I get rid of this file?

A Sometimes the Finder gets confused and won't delete a file using normal procedures. In such cases, the simplest solution is to drag the troublesome file onto the Desktop. Then duplicate any other file and give it the same name as the item that refuses to be deleted. Drag this sacrificial file to the Desktop and click OK when the alert box asks if you want to replace the problem file with the one you're moving. Then drag the replacement file to the Trash. You should have no trouble deleting it. If this doesn't work, try John Jeppson's freeware utility, HellFolderFix, which attempts to repair the disk's catalog file. I'd also recommend running Apple's Disk First Aid or Norton Disk Doctor to see if there is any serious directory damage.



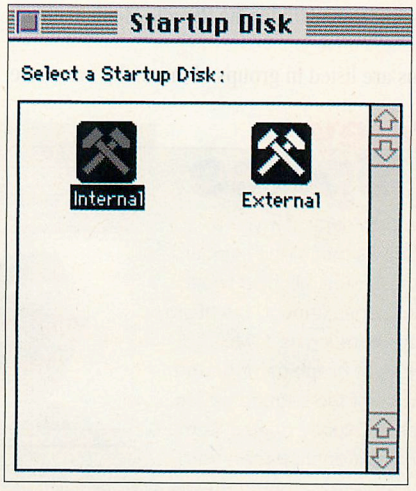
FIND THE SHAREWARE MENTIONED and System 7.5 Update 2.0 on The Disc.



FILES THAT REFUSE TO BE TRASHED can usually be replaced, allowing you to delete the duplicate.

Q Whenever I turn on my Mac, a disk icon appears on screen before the "Welcome to Macintosh" greeting. Sometimes a flashing question mark also appears in the disk icon. What is causing this?

A The flashing disk icon indicates the Mac can't find a startup volume. If it never disappeared, I'd suspect you had serious trouble with your hard drive, in which case I'd recommend using Symantec's Norton Utilities in an attempt to restore your drive's health. However, since the icon appears only temporarily, it sounds like your Mac doesn't have a startup volume selected. That's simple enough to fix. Open the Startup Disk control panel, select the internal hard disk as the Startup Disk (if you have no other drives, it should be the only available icon), close the control panel, and choose Restart from the Finder's Special menu. Keep in mind that if you ever reset the Parameter RAM (PRAM), you must respecify your startup disk again.



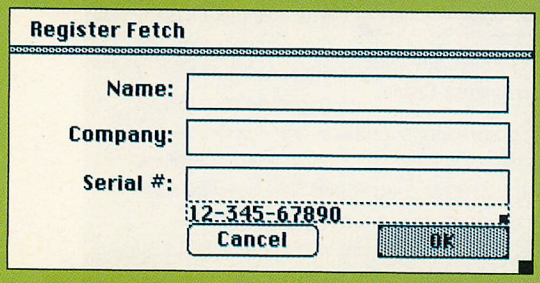
A FLASHING QUESTION MARK inside a disk icon is a good indication that nothing is selected in the Startup Disk control panel.

Q Much as I hate to admit it, Windows 95 has a very useful feature that automatically plays audio compact discs and runs programs on CD-ROMs when a disc is inserted. How can I do this with the Mac OS?

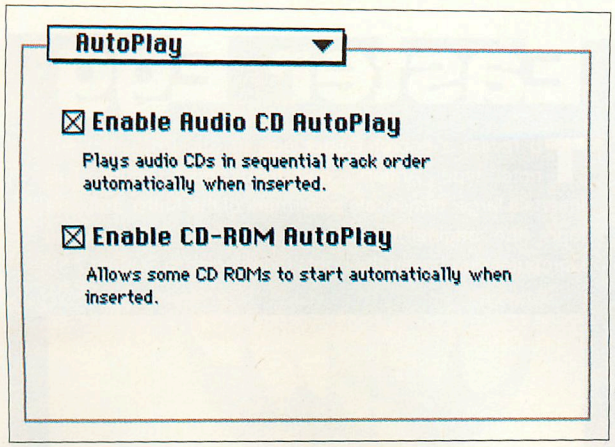
tips

Storing Registration Numbers

In the premiere issue of MacAddict I suggested using empty folders to store program registration serial numbers. Since then an even more elegant solution has occurred to me. If you have an application that requires a serial number to run, duplicate it. Open this duplicate with ResEdit. Double-click the DITL icon and look for a registration dialog box resource. If you're lucky, the resources are named logically. If not, simply double-click each in turn until you locate the registration dialog box. Drag a Static Text object to the registration dialog box, double-click the Static Text object, enter the serial number, click the close box, then make sure the full serial number is visible in the dialog box without obscuring any of the buttons. Quit ResEdit, allowing it to save changes to the application. You can now delete the original application after you've tested the doctored duplicate to make sure it works correctly. From now on, whenever the application asks you to enter the serial number, it will be right there in the registration dialog box!



USE RESEDIT TO EMBED SERIAL NUMBERS in registration dialog boxes for easy reference.

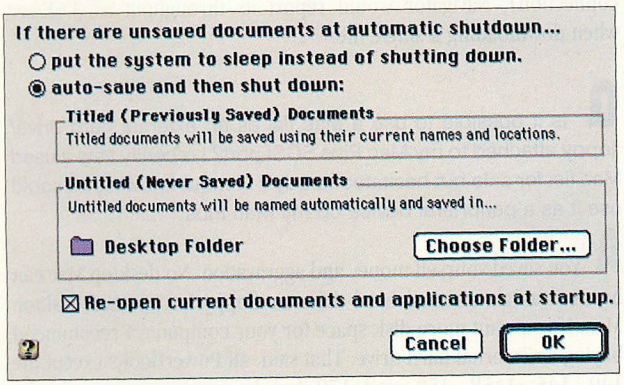


WITH QUICKTIME 2.5, YOU CAN MAKE the Mac automatically play audio CDs and run programs from Mac CDs when they are inserted.

A Ask and ye shall receive. Apple introduced AutoPlay as a new feature in QuickTime 2.5. To enable this feature, open the QuickTime Settings control panel and mark the checkboxes. Why Apple stuck these features in the QuickTime control panel instead of making AutoPlay part of the Apple CD-ROM package is beyond me.

Q Recently my Mac has inexplicably begun creating folders all by itself. These folders appear on the desktop with names like Fri, Aug 16, 1996 7-11 p.m. They are usually empty, but sometimes the folders contain documents. Is my Mac possessed?

A No need to break out the holy water just yet. Sounds like you've unwittingly stumbled upon an Energy Saver feature. Open the Energy Saver control panel and choose Document Auto-Save from the Preferences menu. By default, Energy Saver automatically saves all open documents when it shuts down the Mac so that you never lose work in progress. Any documents that had previously been saved are saved with their current names and locations intact. Untitled documents that have not been saved, however, are given a generic name and placed in a time- and date-stamped folder on the desktop for easy retrieval.



ENERGY SAVER, NOT THE DEVIL, may be responsible for empty folders on your desktop.

Q Whenever my Power Mac 7200/75 wakes from sleep, the volume in the Sound control panel is set to the max, even if the volume was at the lowest setting prior to going to sleep. What can I do to stop this?

A You need version 2.0.1 or later of the Energy Saver control panel, which is included in System 7.5 Update 2.0 (System 7.5.3). Earlier versions cause problems with the Power Mac 7200 series.

Q I have two SCSI devices on my Mac: a scanner and a SyQuest EZ135 drive. Is it OK to turn on just one of these devices if I know I'm not going to use the other? I know that the SCSI devices should be turned on before the computer is turned on, but how about turning them off before the Mac is shut down? If I scan for a few minutes, can I then turn off the scanner and keep the computer turned on?

A SCSI is voodoo; it doesn't always work the way it's supposed to. Apple says that even if you don't plan to use a device, you still must power it on to ensure a proper SCSI signal path. I have several SCSI devices attached to my Mac and I never bother turning them on until needed. I've been doing this for years and so far, no problems. Theoretically, this sort of reckless behavior could harm the devices or the Mac, so I don't recommend it. However, my GCC PLP II printer hangs my new Power Mac 7500 at startup if it's turned on before the Mac, so I have no choice. If your Mac and its devices operate fine with one of the devices turned off, I don't see the harm. On the other hand, if neither device draws too much power or makes too much noise, why not leave them on just to play it safe? One word of warning: NEVER connect or disconnect a SCSI device while the Mac or the device is turned on. This can fry your equipment and cause data loss.

Q I'm about to enter a new job that requires me to use a PC at work (yuck!). I have heard of software that allows me to open Mac files on a PC. Do they work in reverse? In other words, will I be able to open files on a PC-formatted floppy on my Mac? Also, is there any software available that runs Mac software on a Windows machine? Sort of like SoftWindows in reverse?

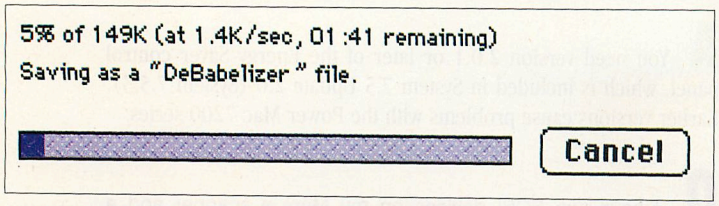
Fun Factoid
Happy Feet!

According to former Apple president Mike Scott, the first time the company exhibited at the Consumer Electronics Show in Chicago, the small band of employees working the booth complained about how sore their feet were from standing all day. Funny thing is, Apple co-founder Steve Jobs, who spent most of his time in bare feet or sandals back in those early days, wasn't complaining. Jobs proudly shared his solution for refreshing himself: he would periodically go to the rest room, sit on top of a toilet tank, plop his feet into the toilet bowl, and then flush repeatedly to create a poor man's whirlpool.

Unsubscribe Me

When you subscribe to a new mailing list on the Net, you usually receive a "welcome" message that explains the mailing list rules as well as instructions for unsubscribing, and how to post to the list. Instead of reflexively deleting these welcome messages, save them in a Mailing List folder so that they're always handy when you need them.

A Sorry to hear that your employer is forcing you to work with Windows. I hope it's at least Windows 95, as it's a lot more Mac-like than earlier versions. With the introduction of the 1.4MB SuperDrive in the revised Mac SE, Macs gained the ability to read PC-formatted disks, provided you had the appropriate utility. For the longest time, such software was an expensive option available from third parties, but Apple includes it free as part of the System 7.5 or later. Simply install the PC Exchange control panel in your System Folder and your Mac will work with 3.5-inch PC-formatted disks, allowing you to open most PC documents with compatible Mac programs. You can't run PC programs on your Mac without SoftWindows or a DOS compatibility card, however. As for running Mac programs on your PC, it's simply not possible. A few years ago Apple was rumored to have been working on a project, code-named Star Trek, which would have ported the Mac OS to the Wintel platform, but it was abandoned for unknown reasons.



WHEN FIGURING MODEM THROUGHPUT, don't confuse bits and bytes.

Q I just bought a Global Village TelePort Platinum so that I could cruise the Internet at speeds up to 28.8Kbps, but when I'm downloading stuff with Netscape Navigator, the little progress window indicates that I'm barely reaching one tenth the maximum speed. Why?

A Because you're confused. Modem manufacturers specify the speed of their products in kilobits per second, whereas Navigator is reporting throughput as kilobytes per second. Since a byte is comprised of eight bits, multiply what Navigator reports by eight to see how close you are coming to your modem's top speed. Conversely, assuming your 28.8Kbps modem is operating with the pedal to the metal (which is rarely the case due to various factors such as the amount of traffic on the Internet and the quality of your connection), Navigator would report its throughput as 3.6K/sec when downloading a single file.

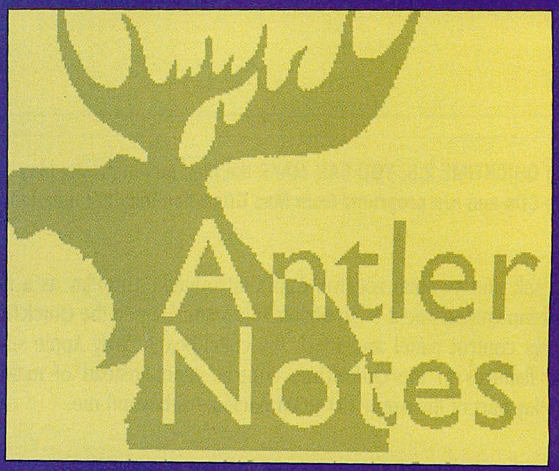
Q Is it possible to use a Mac IIsi as an external hard drive/floppy attached to my Mac Plus SCSI port? I recently saw a used Mac IIsi for sale but hesitated to buy it without knowing if I could use it as a peripheral device on my Mac Plus.

A You saved yourself money and aggravation. No desktop Mac can be used as an external hard drive or floppy for another desktop Mac. If you want more disk space for your computer, I recommend buying an external hard drive. That said, all PowerBooks except the 140, 145, 145B, 150, and 170 can be used in essentially the manner you envisioned. It's called SCSI Disk Mode and it allows the PowerBook to function as an external hard drive connected to a desktop Mac, facilitating file transfers between the two.

Owen W. Linzmayer (AskAddict@AOL.com) is a San Francisco-based freelance writer and the author of "The Mac Bathroom Reader." Please submit technical questions or helpful tips directly via e-mail or c/o MacAddict, 150 North Hill Drive, Brisbane, CA 94005.

Sticky Easter Egg

To reveal a secret Easter egg in Stickies, open any note, type "Antler!", and then press Return. This inserts a large, gray-scale watermark of the Antler Software logo (the original developer of Stickies before Apple Computer purchased the rights to include it in System 7.5).



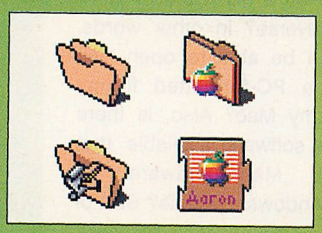
INVOKE A LITTLE "NORTHERN EXPOSURE" atmosphere with this Easter egg in Stickies.

Tips From Our Readers

If you're running Aaron (found online or on The Disc #1 from the premiere issue of MacAddict) and install the Manila Folder icons that we included on The Disc #2 (the October issue), you'll note that the title bar and folder icons don't match. Manila Folder icons don't have the Copland-style shadow effect and they are harder to identify than the Aaron or the standard icons. Here's a solution:

1. Copy the Manila Folder icons to Aaron instead of to the Finder's Preferences file. This way you'll avoid messing with the Finder. If you use Aaron as the icon holder and you mess something up, you can simply restart with extensions off (hold down the shift key at startup), remove the modified Aaron file and replace with a clean Aaron file.
2. Using ResEdit, copy the Manila Folder icons that you like over Aaron's icon files. Match ID number to ID number. You'll get an alert box asking if you want to replace resources with the same ID. Click OK.
3. After you've replaced the selected icons from Manila Folder into Aaron, add some of your own personality to your icons using the ResEdit icon editor—for example, add Copland-style shadows to the Manila Folder icons and recolor the remaining Aaron icons in the Manila Folder scheme.
4. You can create custom Manila Folder icons with Folder Icon Maker running a new resource file. Rename it "Manila Folder Resources," import the Manila Folder icon (-3999) using the icon editor, and modify the file's icon (-16455) so that the mini Manila Folder icon is in the file outline.
5. Add a name suffix (~Aaron Manila) to modified copies of Aaron (you paid the shareware fee, didn't you?) and make a note in the "vers" resource.

—Pete Imandt, Ramona, CA



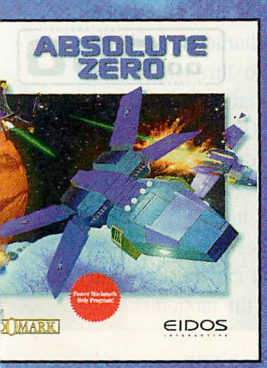
POWER PLAY

FLIGHT SIM PACK

Accelerated for Power Macintosh

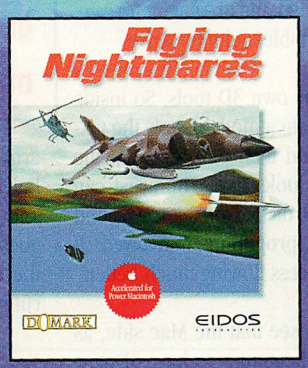
Three award winning, heart-pounding sims for one low price!

Command Harrier "Jump Jets", WWII fighters and sci-fi space vehicles in this high-flying flight sim compilation for the Mac. Choose from over 25 aircraft as you test your skills in past, present and future scenarios.



MacHome Journal

"93%" MacFormat



MacHome Journal

MacUser RATED

MacUser



1994 Game of the Year Award

"1994 Flight sim of the year." Inside Mac Games

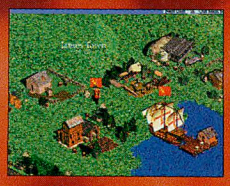
DOMARK

EIDOS INTERACTIVE

powerplay

Dark Vengeance designers concentrate on gameplay, not polygons.

Teasers



Conquest Of The New World

PUBLISHER: MacPlay
CONTACT: 800-4MACPLAY; http://www.macplay.com

You can be the Native Americans, or one of five colonial powers in this turn-based strategy game. Balance building, trade, politics, and warfare in your quest to build the ultimate nation. Each power has strengths and weaknesses (we wonder if smallpox is one of them), so choose wisely.



NASCAR Racing

PUBLISHER: Sierra On-Line
CONTACT: 800-757-7707; http://www.sierra.com

Drive your custom-painted car on 16 different NASCAR tracks. Apple's PlainTalk lets you talk to your pit crew, and optional auto braking and shifting take the hassle out of driving—bet the real drivers would like that. We loved IndyCar Racing II—NASCAR should be at least as good.



Prime Target

PUBLISHER: MacSoft
CONTACT: 800-229-2714

While this game uses the Marathon engine licensed from Bungie, it doesn't just substitute graphics and sounds. This is a mystery that takes place in Washington, D.C.—yes, we always knew that federal buildings were mazes—and you must decipher just where to go. Innovations on the engine enable you to move objects, such as chairs, to get at secret spots, and you shoot the leaves off of plants.

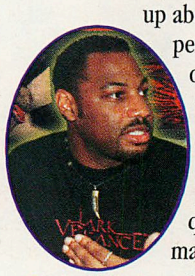
Reality Bytes, creators of Sensory Overload, earlier this year released Havoc, the first game to use Apple's QuickDraw 3D RAVE technology. RAVE allows developers to make 3D games that take advantage of the highest level of detail your machine can produce. For instance, in Havoc, environmental textures look flat on an ordinary Power Mac, but with a 3D accelerator card installed, rocks seem to jump out of the ground. Their next title, Dark Vengeance, a fantasy-action game, also uses RAVE to enhance gameplay. The game begins with an eclipse blocking the sun, allowing evil beasties to come out from their hiding places and take over the world. (You, obviously, have to stop this.)



Jon Chait



David Chait



Reginald DuJour

We chatted with Jon Chait, President and CEO; David Chait, VP of Product Design; and J. Reginald DuJour, Creative Director, about the next level of 3D gaming.

MA: How have your games kept pace with the hardware?

JC: Dark Vengeance is our third generation technology. We kept our 3D engine running fast in software. Now that Apple and other manufacturers are using 3D hardware and gamers are demanding it, we're on the verge of games that feel like full-motion video, but are engine-driven, so they can be comfortable and interactive.

DC: We've built our own 3D tools. So inside our editor, we can create a model, apply the textures, animate him, and then pull him into the game to see what he looks like. The artist can pretty much go do all of that on his own, and doesn't need to get a programmer involved. It keeps the creative process flowing much better.

JC: We're happy to see that the Mac side, as well as the PC side, is beginning to have 3D as a standard.

MA: What happens when 3D chips are in every computer?

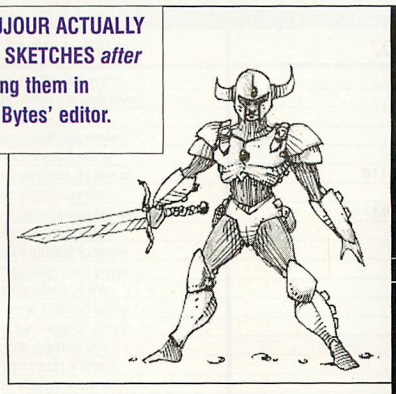
DC: At the point where everything goes to hardware, we don't have to worry about an 8-bit software render, we can assume everything is 24-bit. The artist designs in 24-bit and is done.

JC: Technology is an enabler; it's not the creative process, it's not the design process, it's only a piece that helps the process. In games where you have animated characters, when the game is running at over a certain speed, it takes on a different feel. In Havoc, when you get it up above 30 frames per second, all of a sudden you feel like you're in an arcade, pushing quarters into a machine, and all of a sudden it takes on a different feel than if it's running at 15 frames per second.

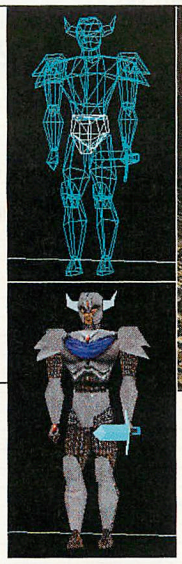
> **"All of a sudden you feel like you're in an arcade, pushing quarters into a machine."**

DC: Dark Vengeance is much the same way; where because all of our animations are done much like you'd do them in a Strata or Infini-D—you actually take a humanoid character, and you go through an animation—you say, "OK, I want the right arm up and the left arm down, and then a half-second later I want the right arm over here and the left arm down, say, here." The engine goes through and interpolates through that for the editor. So the faster you can get the game running, the smoother all of the motion is.

MA: How does this help the creative process?



REG DUJOUR ACTUALLY MAKES SKETCHES *after* modelling them in Reality Bytes' editor.





DC: It used to be that you had to so strictly define what you were doing—X characters, the art has to be done by X date. Now it's just so much more fluid. Every day, it's almost like a new character contest. It's like, "What's the weirdest thing we can do next?" The special effects are just off the deep end, especially the magic spells. We're not planning on being an RPG [role playing game], but we're going to bring to the game a strong fantasy feel by letting you pick your weapons: short swords, long swords, daggers, hammers and axes. Then you get into the magical characters. You have the Wizard and the Sorceress, who can cast fireballs and wield magical shields.

MA: So you do have female characters?

DC: Originally there were five male and five female characters. Now it's six and four, because we needed a little bit more of a balance. The female mage and priest characters are actually more intelligent and have better magic strengths than their male counter parts. So in a one-on-one they could probably toast the male guys. Women basically rule. There's a female assassin who Reg [Reality Bytes' Creative Director] has designed holding two short daggers. We had to figure out how to balance out the rest of the characters to match her, because she can hide in the shadows; she can run up behind you and backstab you... she's definitely one of the bad-ass characters.

RD: We wanted to put some imagination and personality into it. We wanted all the excitement of the action and the combat game, but some humanity in it, too.

DC: Like if you haven't touched the keys for a while, the character will...

RD: Sit there and... sneeze, and then kind of look around, then kind of wipe his hand on his pants. Or he just sits there, and looks around, and then fixes his wedgie. And also just general things, such as cleaning his sword, or polishing his armor, or something. One I've been experimenting with, is that he's just kind of standing there, and then he starts dozing off. So he's holding the sword, and you see it slowly going down, and going down, and then he wakes up.

JC: This was just too hard to do before—you had to code everything. We have it so that even I have given demonstrations of how you build something and animate it. But I don't think they'll let me put any more stuff in the game—not any time soon.

RD: We haven't really sat down and said, "OK, so exactly what are we going to be doing?" We had a basic concept, we had a basic storyline, a basic feel of the game, so we just go instinctively with the story. So there's a lot of, "Hmmm... what would be interesting here?" And then we just design it.

MA: When will we see Dark Vengeance?

JC: We're releasing this a little differently than we have in the past—we'll start by having sneak peeks up on our Web site; then we'll have people playing the demo; then we'll have a light version in time for Christmas; then some of the missions, as well as network play. Then the full game will actually be released in 1997, and that will include editors, so people can build their own worlds and characters. I think the network play will be some of the most fun—you and two of your friends can have this little three-person team, and go through the regular single-player game together.

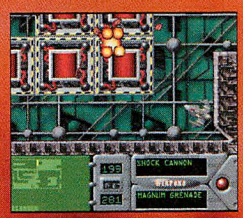
MA: How do you describe what you do?

JC: As a company, I don't know if we push the bleeding edge or if we are sharpening it. We're working with 3D hardware drivers and boards that aren't out yet, and they haven't quite gotten everything tweaked, so sometimes it crashes and we don't know if it is us or them, but that's part of the development process. But knowing that stuff is going to be there, this game, this technology, is going to scale to the next generation, so that as you upgrade your system, Dark Vengeance will be even more realistic. —*Kathy Tafel*

more Teasers

Souls in the System

PUBLISHER: Starplay
CONTACT: 800-203-2503; http://www.starplay.com



This top-down arcade game—a sequel to ShadowWraith—does more than simply add more levels. You can play over a network with only one copy (following the Warcraft model). Souls in the System also features a game recorder so you can watch yourself die over and over again.

Steven Spielberg's Director's Chair

PUBLISHER: Knowledge Adventure
CONTACT: http://www.directorschair.com



Learn the ins and outs of making a movie in Hollywood. Steven Spielberg brings together experts who will help you write a screenplay, make a budget, add sound, and more. You get to put the movie together, but the shots have already been taken.

Virtual Nightclub

PUBLISHER: Philips Media
CONTACT: 310-444-6500; http://www.philipsmedia.com/vnc



If you'd rather be at your Mac at 3 a.m. than out and about, step into the Virtual Nightclub, where you'll find scenes from clubs around the world. If the music alone doesn't do it for you, there's a mystery involved, too.

ADVERTISER INDEX

ADVERTISER	PAGE NO.	PHONE NO.	WEB ADDRESS
Abbott Systems, Inc.	119	800-552-9157	www.abbottsys.com
Access Software	88-89	800-800-4880	www.accesssoftware.com
Apple Computer, Inc.	IFC-1, 8-9, 11	—	www.apple.com
APS	120-123	800-874-1341	www.apstech.com/
Arc,The	117	800-753-0114	www.thearc.com
AT&T WorldNet Service	17	800-WORLDNET x.116	www.att.com/worldnet
ATI	21, 23	—	www.atitech.ca
Brainstorm (a division of Interplay)	28-29	888-4BRAINSTORM	www.brainstormfun.com
Bungie Software	OBC	800-295-0600	www.bungie.com
CH Products	75	800-624-5804	www.chproducts.com
Changeling	59	512-419-7085	www.changeling.com
Claris (Apple software)	2	800-950-5382	www.apple.com
Compu Age	113	800-799-4MAC	www.compu-age.com
Compu America	116	800-533-9005	compu-america.com
Compu.D	117	800-929-9333	www.compu-d.com
Computer Discount Warehouse	126-127	800-653-4239	www.cdw.com
Connectix Corporation	68-69	800-950-5880	www.connectix.com
Cyberflix	87	800-GTET0DAY	www.im.gte.com
Earthlink	73	800-395-8425	www.earthlink.net
Eidos Interactive	107	—	www.eidosinteractive.com
Europa Software	91	—	www.europa software.com
Graphic Simulations	90	214-386-7575	www.graphsim.com
GT Interactive Software	18-19, 65, 67	—	www.gtinteractive.com
GTE Interactive Media	79	800-GTET0DAY	www.im.gte.com
Infinity Micro	117	—	—
Interactive Creations	71	817-424-5638	www.icigames.com
LA Computer Center	112	800-689-3933	ww.lacc.com
LaCie Limited	IBC	800-999-1594	www.lacie.com/~lacie
Leister Productions	119	—	www.leisterpro.com
LLB Company, Inc.,The	118	800-848-8967	www.llb.com
Mac Man Computer Warehouse	114	800-931-2001	—
Mac Market	115	800-223-4622	www.macmarket.com
MacBase	111	800-951-1230	www.macbase.com
MacPlay	53	800-4MACPLAY*	www.macplay.com
MacSoft (Wizard Works Group Inc.)	5, 7	800-229-2714	—
Microtek	83	800-654-4160	www.microtekusa.com
Other World Computing	119	800-275-4576	www.macsales.com
PowerProduction	85	800-457-0383	www.powerproduction.com
Scantron Quality Computers	101	800-777-3642	www.sqc.com
SegaSoft	32-33	888-SEGASOFT	—
Shreve Systems	124-125	800-227-3971	www.shrevesystems.com
Software Source,The	100	800-289-3275	i95www.com/source.html
Sophisticated Circuits	77	—	www.sophisticated.com
Syncronys Softcorp	63	—	www.syncronys.com
The Net	58	—	—
UMAX Computer Corporation	13	—	www.supermac.com
United CD-ROM	80-81	800-864-8334	www.unitedcdrom.com
Westwood Studios	27	800-874-4607	www.westwood.com

MacAddict

How to Contact Us.

For questions regarding editorial content, subscriptions, back issues, or reprints:

phone
(415) 468-4869 (subscriptions)
(415) 468-4684

fax
(415) 468-4686

write
MacAddict
Imagine Publishing
150 North Hill Drive
Brisbane, CA 94005

e-mail
Subscriptions and customers only:
subscribe@imagine-inc.com
(type "MacAddict" into the subject line)

ADVERTISING REPRESENTATIVES
(415)468-4684

André Lengyel, ext. 416
Regional Ad Manager
Bay Area, Northwest, North Central U.S., and Western Canada

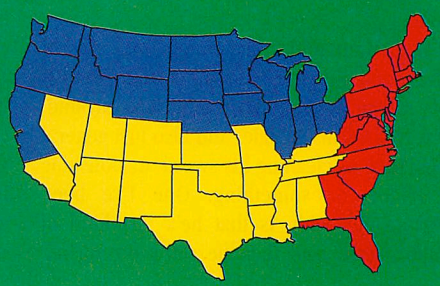
John Singer, ext. 121
Regional Ad Manager
Southwest and South Central U.S.

Christina Sorrentino
Regional Ad Manager
(516) 421-2832
East Coast U.S., Eastern Canada

Mary Lachapelle, ext. 417
Account Manager
Mail Order/Marketplace

Patricia Neuray, ext. 120
Publisher

Jana Massey, ext. 194
Ad Coordinator



We're committed to serving you...

To provide the best customer service possible, we have listed details of how to reach us below.

SUBSCRIPTION INQUIRIES

If you have a change of address, invoice or renewal questions, or haven't received ***MacAddict*** by the first day of the issue month, please contact us:

Write: ***MacAddict***
Customer Service
150 North Hill Drive
Brisbane, CA 94005

Call: (415) 468-4869
E-mail: subscribe@imagine-inc.com
(type "*MacAddict*" in the subject line)
Fax: (415) 656-2486

When writing us, please include your mailing label showing your address. Please allow at least six weeks notice for any change in subscription record.

BACK ISSUES AND CDs

The price per copy for back issues within the U.S. is $8.99 including postage. For foreign orders, send $12.00 in U.S. funds, which includes airmail delivery. To order just the ***MacAddict*** disc within the U.S., send us $6.95 which includes postage. For foreign orders, send $10.00 which includes airmail delivery. All orders must be prepaid and sent to the following address:

MacAddict
Customer Service
150 North Hill Drive
Brisbane, CA 94005

Credit card orders:
Call: (415) 468-4869, M–F, 9 a.m. – 5 p.m. PST
E-mail: subscribe@imagine-inc.com
(type "*MacAddict*" in the subject line)
Fax: (415) 656-2486

RENTING SUBSCRIBER NAMES

MacAddict occasionally rents our subscriber list to other companies that we think offer products of interest to our readers. If you would like your name removed from this list, please let us know.

TECHNICAL SUPPORT FOR THE MacAddict DISC

We are committed to bringing you the best possible disc every month. In the disc pages, we provide the phone numbers of the companies whose demos are featured on the ***MacAddict*** Disc! Please call these companies to assist you with technical support.

TO REPLACE A DAMAGED DISC

Write: ***MacAddict***
Attn: Disc Replacement
150 North Hill Drive
Brisbane, CA 94005

Call: (415) 468-4869, M–F, 9 a.m. – 5 p.m. PST
E-mail: subscribe@imagine-inc.com
(type "*MacAddict*" in the subject line)
Fax: (415) 656-2486

GIFT SUBSCRIPTIONS

To order a gift subscription of ***MacAddict*** for a fellow Mac user, call 1-888-4IMAGINE.

L O W E S T P R I C E S G U A R A N T E E D

Power Macintosh

7600/120 16/1.2GB/CD/L2

• PowerPC™ 604 running at 120 Mhz
• Three PCI slots
• Built in ethernet and video
• Video in Capabilities

$2299 LIMITED

Mon. & Kb sold separately

7200/120 16/1.2GB/CD/L2 $1889
7200/120 16/1.2GB/8xCD/L2 $2159
7200/120 24/1.2GB/CD/PC Pentium $2599
7500/100 16/500/CD $2099
7600/132 16/1.2/8xCD/L2 $2759
8500/132 16/1.2GB/CD/L2 $2649
8500/150 16/2GB/CD/L2 $2899
8500/180 16/2GB/8xCD/L2 $4179
9500/132 16/1GB/CD/L2/VI $2729
9500/150 0/0/CD/L2/VI $2929
9500/180MP 32/2GB/8 $5399
9500/200 0/0/8xCD $3299
9500/200 32/2GB/8xCD $4298

NEW!

Performa

6200CD Ref/ 6300CD $999/$1399
638CD 8/500/CD $1198
5200CD 8/800/CD $1298
6116CD 8/700/CD $1298
6300CD 8/1GB/CD/14 $1598

P638CD $1198

Dealers inquiry welcome. Returned products are subject to a restocking fee. Prices reflect cash or C.O.D orders &subject to change w/o notice .*POs are subject to credit approval

PowerBook

Duo 2300c 8MB/750HD/M

• PowerPC 603e running at 100 Mhz • 9.5" backlit Active Color Matrix Display •8MB of RAM expandable to 56 • Optional external floppy drive • Apple Express Modem

$1589

520 8/240 w/Case $799
PB 190cs/66 8MB/500 $1299
PB 5300c/100 8/500 CALL
PB 5300ce/117 32/1.2GB Instock
2300c 20/1GB/M $2389
Duo Dock II Plus $529

GLOBAL VILLAGE COMMUNICATION

APPLE CD 600e

$149 Limited Supply

Printer & Monitor

Apple MultiScan 14 $299
Apple 15" $359
Apple 1705 $699
Apple 1710 $889
Apple 1710AV $959
Apple MS 20/20" REFURB $1799/$1279
Color StyleWriter 2400/1200 $289/$189
Color StyleWriter 2500/1500 $389/$279
Laserwriter 12/640 $1498

Color StyleWriter 2400 $289

UMAX Computer Corporation SUPERMAC **S900D** A.S.P.D.

$2799

Mon. & Kb sold separately

Offering 150 Mhz PowerPC™ 604 processor, 8X CD-ROM, 6 PCI slots, 5 expansion drive, 16 MB of RAM, Built in SCSI-2 and 10Base-T, Ext. KB, Mouse, Conflict catcher 3.0, Asante Net doubler, Mac™ O/S, and FWD CD-ROM & H/D

C500/140 16/2.1/CD $1499
C600/160 16/2.1/CD $1699
J700/150 16/2.1/CD $2898
S900L/150 16/2GB/CD $3349
S900L/166 16/2GB/CD $3895
S900L/180 16/2GB/CD $3698
S900L/200 16/2GB/CD $3898
S900/180 MP $4595

MEMORY

8MB / 16MB DIMM $89/$119
32MB / 64MB DIMM $229/$429
256K/512K CACHE DIMM $89/$139
1MB V-RAM $49
4MB / 8MB SIMM $49/$85
16MB / 32MB SIMM $119/$225
4MB / 8MB (PB5300&190) $99/$119
16MB /32MB(PB5300&190) $199/$309

Free FedEx Two Day Shipping

*Only For Memory products purchased

Jaz Drive

MacBase 1GB Jaz Dr $469
Jaz 1GB Cartridge $99

iomega

Now On World Wide Web
http://www.MacBase.com

GOVERNMENT, UNIVERSITIES, & FORTUNE 1000* COMPANY P.O.s ARE ACCEPTED

Call Us For Current Pricing

MacBase® U.S.A

Since 1988
1941 Freeman #B
Signal Hills, CA 90804

Mon-Fri 8:00 To 6:00
SAT 10:00 TO 2:00 PST

FedEx MasterCard AMERICAN EXPRESS Card VISA DISCOVER

(800) 951-1230

INTERNATIONAL(310)498-1230 , FAX(310)498-0032

LA's LEADING COMPUTER STORE!

LA COMPUTER CENTER

CALL (800) 689-3933

UNIVERSITY, SCHOOLS, GOV'T & FORTUNE 1000 P.O.'S ACCEPTED!
Call for Quantity Pricing!
INTERNATIONAL ORDERS WELCOME CALL PH. (310) 479-0999
Customer Service (310) 473-2535 FAX (310) 312-9041

POWERMACS

9500/150
16/2GB/CD
w/2MB ATI
$3499
KEYBOARD & MONITOR SOLD SEPARATELY

8500/180
16/2GB/CD
w/2MB VRAM **$CALL**
&200MHz!
8500/150 16/2GB/CD
$2899
KEYBOARD & MONITOR SOLD SEPARATELY

7200/120
16/1.2GB/CD/256L2
$1899

7600/120
16/1.2GB/CD
$2199

KEYBOARD & MONITOR SOLD SEPARATELY

6100,7100,8100'S	$CALL
5260/100 16/800/CD Built In	$1449
7200/120/P10016/1.2GB/CD	$2399
7500/100 16/500/CD	$1699/1599*
7500/100 16/1GB/CD	$1849/1699*
7600/132 16/1.2GB/8xCD	$2679
8500/120 16/1GB/CD	$2199*
8500/120 16/2GB/CD	$2299*
8500/132 16/1.2GB/CD	$2549
9500/120 16/1GB/CD	$2299/2099*
9500/132 16/1GB/CD	$2399*
9500/132 16/2GB/CD	$2449*
9500/150 0/0/CD	$2899

WorkGroup Servers

7250/120 16/1.2GB/CD	$2499
7250/120 16/1.2GB/CD/AS	$3299
8150/110 16/1G/CD/DAT/AS	$3495
8550/132 24/2GB/CD/AS	$5599
8550/132 24/2GB/CD/INT	$5149
8550/132 24/2G/CD/DAT/AS	$6295

PERFORMAS

Performa 6400CD
180MHz! $2099
16/1.6GB/8xCD/28.8Kbps
No Cache, No Monitor
200MHz! $2299
16/2.4GB/8xCD/28.8Kbps
256K L2Cache, No Monitor

Performa 6320CD
16/1.2GB/CD
CPU, KEYBOARD, MOUSE, TV & 15" MONITOR **$1995**

5200/75 8/800/CD Built In	$1299
6116/66 8/700/CD No Mon	$1049*
6200/75 8/1GB/CD No Mon	$1099
6220/75 16/1GB/CD/NoMon	$1199*

APPLE MONITORS

AppleVision 1710AV $929

14" MultiScan	$249
14" AV	$269
15" MultiScan	$349/299*
1705 17" MultiScan	$649
1710 MultiScan	$799
20" MultiScan	$1699
SONY 15SF2 15"	$399
SONY 17SF2/17SE2 17"	$769/999
SONY 20SF2 20"	$1599

POWERBOOKS

5300CE	32/1GB	$4099
5300C	16/750	$CALL
5300C	8/500	$2499
5300CS	16/750	$CALL
5300CS	8/500	$2099
5300 Grayscale	8/500	$1499
540C	4/320	$CALL
540C	12/320/MOD	$CALL
520C	4/240	$CALL
520C	12/240/MOD	$CALL
520	8/240	$799
190CS	8/500	$1399
190	8/500	$949
150	8/250 w/14.4Kbps Ext.	$769
DUO2300C	8/750	$1599
DUO2300C	20/1.1GB/MOD	$2199
DUO250	4/200	$599*
DUO250	12/200/MOD	$999*
DUO280C	12/320/MOD	$1799
DUO280	12/240/MOD	$1299*

PRINTERS

LaserWriter Personal 300	$429
LaserWriter Personal 320	$549
LaserWriter 4/600	$699
LaserWriter Select 610	$CALL
LaserWriter 16/600/PS	$2099
COLOR LW 12/600/PS	$5299
StyleWriter 2500/1500	$369/249
StyleWriter 2400	$279/199*
StyleWriter 2200	$299
Star Color Printer XJ144MC	$99
HP LaserJet 5MP	$949
HP LaserJet 5M	$1779
HP LaserJet 4MV	$2699
HP DeskJet 870Cxi	$499

ACCESSORIES

Global Village Communication
Teleport Gold II 14.4Kbps External $69
PowerPortMercury 500 Series19.2Kbps$179
PowerPortGold PCMCIA 14.4Kbps $69
PowerPortPlatinum 28.8Kbps $335

AGFA
Arcus II $1799 DuoScan $4499
StudioScan IIsi $649
SnapScan $CALL

UMAX
Vista S6-E LE $349
Vista S12 Pro $749

iomega
Zip Drive w/1 Cart $179
Jaz Drive w/1 Cart $449

600E 4xCD External $179

Visit Us At Our *NEW* Web Site http://www.LACC.com
24Hrs A Day -- On-Line Catalog & Ordering
E-Mail us at: lacc@lacc.com

GE 4 YEAR ON SITE WARRANTY!
ASK YOUR SALES REP REGARDING GE EXTENDED ON SITE WARRANTY

$100 to $350	$351 to $350	$701 to $1200	$1201 to $2000	$2001 to $3000	$4001 to $5000
$49.95	$79.95	$139.95	$169.95	$199.95	$259.95

DHI Product Plus™ 3 Year WARRANTY PROTECTION 5 Year WARRANTY PROTECTION
NEW OR REFURBISHED PRODUCTS ELIGIBLE FOR COVERAGE
INCLUDES FREE SURGE PROTECTOR

FedEx NEXT DAY AND SAME DAY SHIPPING AVAILABLE, WE SHIP WORLDWIDE!

OPEN MON-SAT. VISIT OUR SHOWROOM!
12002 PICO BLVD. WEST LOS ANGELES, CA 90064

* Reflects Refurbished Units. Prices Subject To Change Without Notice. CALL FOR LATEST PRICE. ALL PRICES REFLECT A 3% CASH DISCOUNT. Credit Cards Will Be Verified For Fraudulent Use.

New Epic Powerbooks here first!! Call for deals!

CompuAge

Lowest Prices and Best Service

PowerPC's

7200/120	16/1.2/cd/l2	$1749
7200/120	8/1.2/cdx8	$2099
7200/12	16/1.2/cd/dos	$2395
7600/120	16/1.2/cd	$2195
7600/132	16/1.2/cd	$2595
8500/132	16/1.2/cd	$2495
8500/150	16/2g/cd	$2895
8500/180	32/2g/cd	$3895
9500/120	16/1.2/cd	$2395
9500/132	16/1g/cd	$2595
9500/150	32/2g/cd	$3599
9500/200		call

Specials!!

PB 520 4/240
$779!!

Laserwriter 320
$399.00

Powerbooks

Pb 150	8/250	$695
Pb 520	4/240	$795
Pb 520	12/240/mod	$1095
Pb 520c	12/240/mod	$1399
Pb 5300cs	8/500	$1999
Pb 5300cs	16/750	$2499
Pb 5300c	8/500	$2499
Pb 5300c	16/750	$2899
Pb 5300ce	32/1.2g	$3899
Duo 2300c	8/750	$1499
Pb 1400cs	12/750	call
Pb 1400cs	16/750/cd	call
Pb 1400c	16/g/cd	call

800-799-4MAC

We will beat any verifiable price!

Performas

580	8/800/cd	$889
5200	8/800/cd	$1289
6116	8/700/cd/14/kb	$1195
5320	16/gig/cd/15/kb	$1789
6300	16/gig/cd/15/kb	$1799
6320	16/gig/cd/15/kb	$1949
6400	(180)16/1.6/cd/Kb	$1999
6400	(200)16/2.6/cd/Kb	$2299

tel: 310-358-9000

Call for Quote!!!

Monitors

Apl 14" MS	$299
Apl 15" MS*	$299
Apl 15" MS	$349
Apl 1705	$699
Apl 1710	$799
Apl 1710av	$899
Apl 20"MS	$1899
Radius 15"	$195 (b&w)
Sony, NEC, Radius..call!	

fax 310-358-9100

Printers

SW 2400	$299
SW 1500	$249
SW 2500	$349
LW 300	$379
LW 320	$399
LW4/600	$685
LW 12/640	$1499
Apl color LW	$5199

1. Prices are subject to change based on availability.
2. International orders welcome
3. All prices displayed are cash discounted, we do accept major credit cards however. Please call us
4. We do accept trade-ins
5. We ship via fedex and UPS

Online..Daily Specials, latest price lists, Macintosh tips

http://www.compu-age.com

LOW LOW RATE BUSINESS LEASING
0 DOWN APR
100% TAX DEDUCTIBLE

MACMAN COMPUTER WAREHOUSE

WE DO CUSTOM CONFIGURATION
GOV'T, UNIVERSITY
CORPT. P.O'S WELCOME

MACMAN COMPUTER WAREHOUSE 16116 Sherman Way Van Nuys, CA 91406
Internet Address: 102431.2627@COMPUSERVE.COM

800-931-2001

International Orders Tel: 818-901-6250 Fax: 818-901-6260
Bestellen Sie per Tel/Fax und genießen Sie den Vorteil des teifen U.S $$$ Kurses.
Internet:102431.2627@COMPUSERVE.COM



$1729
Arcus II #3791

#37572 **Studio Scan II si** $679
#37579 **DUO SCAN** $4895
36-Bit 4000 dpi Hottest Scanner
Nikon #3762 CoolScan LS 20E $1279
#3760 Super CoolScan $1999



EPSON Stylus Pro XL
$1649
#6702
#6703 **Stylus Pro** $399

7600/120
32MB RAM/1.2GB HD
Apple 1705 Mon/CD
Kybd/256K L2 Cache
#1726
$3299

$108 a month Lease 36 Mnts.
$127 a month Lease 36 Mnts.



7200/120
32MB RAM/1.2GIG HD/CD
Apple 15"/L2 Cache
Ext. Kybd/28.8 Fax/Mo
Lease $87 a month
$2595
#1782

7600/132
48MB RAM/8x CD
2GIG HD/L2 Cache
Sony 17 SF II
Extended Keyboard
#1791
$3895

Iomega zip 100MB $179
#4898
Zip Cart. 100MB 5pk $69
ask for item #4897
Jaz Cart. 1GIG 5pk $499
ask for item #4885



Iomega jaz 1Gig
#4836
$449

$153 a month Lease 36 Mnts.

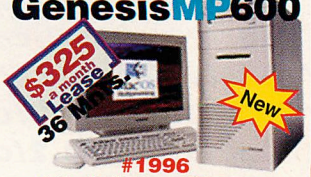


UMAX Computer Corporation
New
S900D
150MHz 604
48 RAM/2GB HD
Sony 17 SF II/CD
IMS 128 4MB
Extended Keyboard
$4695

S900L/180DP
180MHz 604
80 RAM/4GB HD
Sony 20 SF II/CD
IMS 128 4MB
Extended Keyboard
Lease $224 a month
#1980
$6895

S900D
150MHz 604
32 RAM/1GB HD/CD
ATI 2MB Graphic
15" Color Mon/KYBD
Lease $120 a month
#1927
$3695

DAYSTAR DIGITAL
GenesisMP600
$325 a month Lease 36 Mnts.
New



#1996
4-Built in150MHz Procsr.
64MB RAM/KYBD/CD8x
4GB HD/IMS 128 4MB
Sony 17 SF II/512K Cache
$9995

MEMORY

#5942	8MB DIMM	$89
#5106	16MB DIMM	$139
#5952	32MB DIMM	$229
#5849	64MB DIMM	$399
#5033	4MB SIMM	$59
#5752	8MB SIMM	$79
#5792	16MB SIMM	$129
#5298	32MB SIMM	$219

New
Sony DKC-ID1 #9455
12x Zoom Lens
450--pixel Scan Chip
Auto/manual Focus
call for price & Info.

Kodak digital science #9612
$895
DC50 Zoom

$8495 DCS420 #9684
DC20 $299 #9616
DC40 $549 #9650

Kodak Film Scanner
#3182 RFS 2035 $6349
#3159 RFS 3570 $7895

Seagate Elit
$1995
Elite 9GB F/W External HD
11ms 5400 RPM
#4917

CAPACITY	INT		EXT	
#4978	1.2GIG	$289	#4979	$349
#4405	2GIG	$369	#4405	$429
#4252	4GIG	$899	#4253	$999
#4125	2.5 GB	$749	#4124	$849
	Baracuda Fast & Wide 8MS 7200RPM 512k Buffer			
#4501	4.3GB	$1029	#4502	$1095
	Baracuda 8MS 7200RPM 1024k Buffer			
#4512	4.3GB	$1149	#4513	$1249
	Baracuda Fast & Wide 8MS 7200RPM 1024k Buffer Incl. FWB ToolKit			

7200/120 CD
24 MB/1.2GIG HD
L2 Cache/33.6 Fax
15" Color Mon/Kybd
Umax Vista S6e Scanner
$2799 #1315

Free Claris Works



$3999
Fargo Pictura 310E #6618
11x17 Dey-Sub PCI
#6617 Primera Pro $1285
#6626 FotoFun 4X5 $495

8500/132
48MB RAM/2GIG HD/CD
Apple 1710 Mon.
Apple Ext.II Keyboard
#1768
$3995

$130 a month Lease 36 Mnts.
$175 a month Lease 36 Mnts.



8500/150
64MB RAM/2GIG HD/CD
Apple 20" Mon./4MB V-RAM
Apple Ext.II Keyboard
#1738
$5295

Special Of The Month
Pentium PCI Dos $799
#7250

HP Laser Jet 4MV
$2649
#6284
HP Laser Jet 5MP $969
#6935

8500/180/CD8x
64MB RAM/2GIG HD
Apple 1710AV Mon.
Apple Ext.II Keyboard
Lease $180 a month
$5495
#1758

PowerShop
$1749
PCI or NuBus
#7988
PhotoShop Accelerator

5300cs/100
16MB RAM/500MB HD
Global 28.8 FaxModem
Carrying Case
$2599 #1151

5300CE	32/1GIG	#2035	$3999
5300c	16/750	#2085	$2999
5300cs	16/500	#2084	$2299
5300cs	24/750	#2081	$2749
5300	16/500	#2052	$1499
190cs	24/500	#2500	$1499

Monitors

#8941	Apple 15"	$379
#8962	Apple 1705	$699
#8267	Apple 1710	$899
#8269	Apple 1710AV	$949
#8273	Apple 20"	$1795
#8456	15" SF II Color	$449
#8455	17" SF II Color	$799
#8453	20" SF II Color	$1595
#8457	2000CT	$3095

radius
#81526 PrecisionView 21 $2195
#8125 PressView 21SR $3249

#0579 Adobe Premiere 4.2 $479
#0517 MicroMedia FreeHand 5.5 $349
#0542 Director MicroMedia Studio $829
#0584 Adobe Illustrator 6.0 $329
#0523 Adobe PageMaker 6.0 $399
Office #0532 Microsoft Office 4.2.1 $379

#0558 Quark Xpress 3.32 $629
#0516 Norton Utilities 3.2 $89
#0527 Adobe PhotoShop 3.05 $389
#0558 MicrosoftWord 6.01 $229
#0595 Director w/shockwave 5.0 $749

9500/200
128MB/4GIG HD/CD
IMS Twin Turbo128 8MB
Radius Pressview 21SR
Apple Ext.II Keyboard
#1700
$9995

$319 a month Lease 36 Mnts.
$249 a month Lease 36 Mnts.



9500/150
96MB RAM/ATI 4MB/CD
4 GIG Fast & Wide HDD
FWB SCSI Accelerator
Apple 20" Monitor
Apple Ext.II Keyboard
#1779
$7595

9500/132
80 Ram/2GB HD/CD
ATI 4MB/Ext. kybd
Apple 1710 Mon.
#1759 **$4495**

9500/180/CD
160RAM/ATI 4MB/CD
4 GIG Fast & Wide HDD
FWB SCSI Accelerator
Apple 20" Color Display
Apple Ext.II Keyboard
Lease $270 a month
$8295
#1799

CPU's ONLY

8500/150/CD 48MB RAM/2GIG HD	#2521	$3295
9500/132/CD 48MB RAM/1GIG HD	#2945	$3099
9500/150/CD 64MB RAM/2GIG HD	#2699	$3949
9500/180/CD 80MB RAM/2GIG HD	#2290	$4695

CPU's ONLY

7200/120/CD 32MB RAM/1.2 HD	#2158	$2095
8500/132/CD 32MB RAM/1.2GB	#2586	$2795

WACOM

Wacom Art -Z II 6X8	#0416	$295
Wacom Art -Z II 12X12	#0515	$399
Wacom Art -Z II 12X18	#0514	$649

Performa

#1248	5320 16/1GIG/CD/15"	$1895
#1394	6200 8/1GB/CD/15"	$1549
#1237	6320 16/1GB/CD/15"	$2295
#1426	6400 16/1.6GB/CD8x/180MHz	$2295
#1451	6400 16/2.4GB/CD8x/200MHz	$2495

Due to publication time advertising prices may vary. All prices includes cash discount. All products carry one year minimum manufactur's warranty on parts and labor. All Returns must have an authorization Number(RMA). Shipping and service fees are non-refundable. No Sales Tax outside of CA. Business hours are 8am to 6pm Mon-Sat.

LOW RATES
BUSINESS LEASING AVAILABLE

MacMarket
1-800-905-3034
Fax: 818-708-6399

Mac Market

Get the latest Microsoft Word or Excel for only $49 with purchase of any UMAX CPU

Call Today for Your Catalog

Bell Memory

DIMMS 64BIT•168PIN
- 8MB ..... $89 #M1628
- 16MB ..... $119 #M1625
- 32MB ..... $209 #M1622
- 64MB ..... $399 #M1619

SIMMS 32BIT•72PIN 60NS
- 8MB ..... $89 #M1598
- 16MB ..... $119 #M1595
- 32MB ..... $209 #M1604

PowerBook Memory

5300 & 190	8MB	#M1387	$119
	16MB	#M1390	$199
	32MB	#M1393	$299

DAYSTAR DIGITAL

New ITEM! 2-180MHz Processors on One Card
nPOWR 360+ $1359 #A4413
for PPC 7500,7600,8500,9500,UMAX Clones
100MHz PowerPro 601 ... $1159 #A4500
Quadra Series, C610, C650 (610 needs an adapter)
100MHz Turbo 601 ..... $1139 #A4509
IICi, IISi, IIVx, IIVi and Perfoma 600

Polaroid



- SprintScan/ES $1469 #S8547
- SprintScan+ $1869 #S8550
- SprintScan/LE $709 #S8555

PINNACLE MICRO
THE OPTICAL STORAGE COMPANY

$999 RCD 4x4 #E7258 4 Speed Read & Write
- Tahoe 640 ..... $699 #E7257
- Vertex 2.6GB ..... $1436 #E7253
- RCD 5040 ..... $829 #E7248

Nikon
ELECTRONIC IMAGING
- SuperCoolScan ..... $1899 #S8503
- CoolScan II ..... $1159 #S8500

INTEGRATED MICRO SOLUTIONS



TwinTurbo128M
- 4MB VRAM ..... $399 #V9240
- 8MB VRAM ..... $749 #V9238

AGFA
- ARCUS II ..... $1789 #S8482
- SnapScan ..... $349 #S8492
- Studio Scan IISi ..... $619 #S8477
- StudioStar LE ..... $779 #S8493

Adaptive Solutions POWERSHOP

PowerShop PCI $1797 #V9244
Fast Photoshop Accelerator for PCI Mac's

GLOBAL VILLAGE COMMUNICATION

PowerPort PC Cards
- PlatinumPro28.810Base-T .. $479 #F8147
- PowerPort Platinum 28.8 .... $319 #F8150
- TelePort Internet ..... $195 #M8121
- TelePort Plat.Comm Slot ..... $195 #M8122

Protect ME! APC

FREE UPS Back-UP
with the purchase of any Umax CPU

Call for best pricing

UMAX SUPERmac

S900L/225MHz/604e CALL
32MB/2.1G-7200rpm/IMS128Mw/8MB/8xCD/Kybrd & M #A1642 ..

S900L/180MHz-DP/2-604e CALL
32MB/2.1G-7200rpm/IMS128Mw/8MB/8xCD/Kybrd & M #A1637 ..

S900L/200MHz/604e CALL
32MB/2.1G/IMS128Mw/4MB/8xCD/Kybrd & M #A1639 ..

S900L/180MHz/604e CALL
32MB/2.1G/IMS128Mw/4MB/8xCD/Kybrd & M #A1641 ..

J700L/150MHz/604 CALL
16MB/2.1G/2MBVRAM/6.7xCD/Kybrd & M #A1633 ..

Computers That Fit Your Budget

C500L/200MHz/603e CALL
16MB RAM/2.1GB HD/8xCD/28.8. #A1643 ...

C500L/180MHz/603e CALL
16MB RAM/2.1GB HD/8xCD/28.8. #A1645 ...

C500L/160MHz/603e CALL
16MB RAM/1.2GB HD/8xCD/28.8. #A1647 ...

9500 Dual Processor 180MHz 604e
(With Daystar's npower 2-180MHz Processor)
32MB RAM/2GB HD/8xCD . $4,757 #A1708

Power Macintosh

PM 9500/200MHz/32MB/2GB/8xCD/2MBVRAM	$4,599	#A1699
PM 9500/180MP/32MB/2GB/8xCD/2MBVRAM ..	$5,395	#A1700
PM 9500/150MHz/16MB/2GB/4xCD/2MBVRAM .	CALL	#A1662
PM 9500/132MHz/16MB/1GB/4xCD/2MBVRAM	$2,859	#A1229
PM 8500/180MHz/32MB/2GB/8xCD/L2Cache ..	$3,995	#A1688
PM 8500/150MHz/16MB/1.2GB/8xCD/L2Cache	$3,279	#A1686
PM 8500/132MHz/16MB/1.2GB/4xCD	$2,795	#A1658
PM 7600/132MHz/16MB/1.2GB/8xCD/L2Cache	$2,679	#A1684
PM 7600/120MHz/16MB/1.2GB/4xCD/L2Cache	$2,269	#A1656
PM 7200/120MHz/16MB/1.2GB/8xCD/L2Cache	$2,129	#A1651
PM 7200/120MHz/16MB/1.2GB/4xCD	$1,895	#A1652

Performas

6320CD/120MHz/16MB/1GB/TV/Video Tuner/28.8 ..	$1,699	#A1104
6300CD/100MHz/16MB/1GB/15"Monitor/28.8	$2,179	#A1193
6400CD/200MHz/16MB/2.4GB/8xCD	$2,449	#A1189

Apple® Powerbooks®:
Call for configuration & price



SALE **The Latest Software Titles**

Microsoft Word V6.01	$278	#S1300	Adobe PageMaker V6.0	$519	#S1027
Microsoft Excel V5.0	$278	#S1302	Adobe Illustrator 6.0	$343	#S1014
Microsoft Office V4.2.1	$420	#S1306	MacroMedia Freehand V5.5 ...	$355	#S1272
Adobe Photoshop V3.0.5	$515	#S1020	Director MultiMedia Studio	$836	#S1284

RASTEROPS®

SuperScan Mc801HR $1899 #M6521



- SuperScan 17"(.26) ..... $919 #M6504
- SuperScan 20" .... $1359 #M6525
- SuperScan 21" ..... $1699 #M6702

EPSON Printers
StylusColor ProXL $1699
12" x 18" 720 dpi Color #P3291
StylusColor Pro InkJet ..... $379 #P3288



TRUEVISION® Video Editing
- Targa 2000 ..... $3768 #V9200
- Targa 1000 ..... $2535 #V9204

UMAX

Powerlook 2000	CALL	#S8559
Powerlook II Full	$1869	#S8520
Powerlook II LE	$1749	#S8522
Vista S6E PhotoDeluxe	$294	#S8439
Vista S6E Photoshop	$529	#S8431
Vista S12 Photoshop LE .	$679	#S8564
Vista S12 Photoshop Full	$759	#S8565

Newer TECHNOLOGY



MAXpowr
with 604e Processors
Designed for 7500, 7600, 85, & 9500 PowerMacs
200MHz .. $919 #A4418
180MHz .. $757 #A4416

DIMMS 64BIT 60ns
- 8MB ... $78 #M1448
- 16MB . $118 #M1451
- 32MB . $229 #M1454
- 64MB . $429 #M1457

NUpowr™
167MHz PB500 Upgrades•PowerPC
- CPU Only ..... $619 #A4560
- w/8MB RAM ..... $849 #A4564
- 117MHz 8MB RAM ..... $525 #A4544

HEWLETT PACKARD

680c	600X300	$299	#P3465
5MP	600dpi	$939	#P3232
4MV	600dpi	$2649	#P3235
DeskJet 1600CM		$1939	#P3410

SONY



- 15 SF2.... $459 #M6438
- 17 SF2.... $759 #M6580
- 20 SF2.. $1649 #M6574

International Call: 818•708•6388
Customer Service & Technical Support Call: 818•708•6388
Fax: 818•708•6399

MacMarket is Located at:
6924 CANBY AVE UNIT #104
RESEDA CA. 91335
M-F 8AM-6PM (Pacific)

All Prices reflect a Cash Discount. Any other method is 2% higher. Prices are subject to change without notice. All Returns are subject to restocking fee, must be in original package, condition & needs an RMA#. No Refunds on Labor or Freight Charges. We accept Visa, Mastercard, Discover & American Express. P.O.s accepted from U.S. Gov't, Schools & Corporations. Not responsible for typographical errors.

Call 800-905-3034 Local 818-708-6388

DISCOVER MasterCard VISA

See us at http://www.macmarket.com Visit us as often as you like.

ONLINE CATALOG! HTTP://WWW.COMPU-AMERICA.COM

Complete two page spec sheets, photos, up to date pricing, and online ordering. Check out all of the things not in this ad. Special Web Pricing is available for Web users.

8500/150
16/2G/4XCD ON SALE!

$3899

- PPC 604 AT 150MHZ
- VIDEO IN & OUT
- AVID VIDEO SHOP
- 256K CACHE
- 3 PCI SLOTS
- TOWER CASE

7600/120
16/1.2G/4XCD ON SALE NOW!

$2199

- PPC 604 AT 150MHZ
- VIDEO IN & OUT
- AVID VIDEO SHOP
- 256K CACHE
- 3 PCI SLOTS
- TOWER CASE

COMPU AMERICA
"The Computer Specialist"

1800-533-9005

EMAIL: CompuAmer@aol.com

(310) 446-1771
FAX Bids
(310) 475-7744

10435 Santa Monica Blvd
LA, CA 90025

We are open on Saturday!

Come and see our HUGE showroom! We ship WORLDWIDE!

We accept Government, Fortune 1000, and University P.O.'s.

PERFORMA 6320
16/1.2G/4XCD $1999

$1999

- PPC at 120Mhz
- 15" Display
- TV Tuner Card
- 28.8 FAX/MDM
- 101 Keyboard
- Includes Mouse
- Software Bundle

PERFORMA 580
8/500 $899
8/800 $999

PRICE WAR!

- 66MHZ 040
- 101 Keyboard
- 14" Built in
- Perfect for Home
- Giant Software Bundle Included

200MHZ POWERMACS AND PERFORMAS ARE HERE!!! WOW!!!!

POWERMAC

7200/75	8/500/CD	1049/969*
7200/90	16/500/CD	1399/1349*
7200/120	8/1.2G/CD	1699
7200/120	16/1.2G/CD	1899
7200/120	16/1.2G/CD/DOS/586	2399
7500/100	16/500/CD	1699/1599*
7500/100	16/1GIG/CD	1799/1699*
7600/120	16/1.2G/CD	2199
7600/132	16/1.2G/CD	2599
8500/120	16/1GIG/CD	2399/2199*
8500/120	16/2GIG/CD	2599/2399*
8500/132	16/1.2GIG/CD	2499
8500/150	16/2GIG/CD	2799
8500/180	16/2GIG/CD	3899
9500/120	16/1GIG/CD	2199/2099*
9500/132	16/1GIG/CD/V	2799
9500/132	16/2GIG/CD	2299*
9500/150	16/2GIG/CD/VID	3499
9500/180	16/2G/CD	CALL
9500/200	16/2G/CD	CALL
6100/66	8/500/CD	CALL
6100/66	16/500/CD/DOS	CALL
8100/100	8/700	CALLI
8100/110	16/2GIG/CD	2399*
WGS 6150/66	16/700/CD	1495
WGS 7250/120	16/1.2G/CD	2499
WGS 7250/120	16/1.2G/CD/SHARE	3299
WGS 8150/110	16/1GIG/CD/SHARE	3495
WGS 8550/132	24/2GIG/CD/DAT	6295
WGS 8550/132	24/2GIG/CD/SHARE	5599
WGS 8550/132	24/2GIG/CD/DAT/SHA	6299
WGS 9150/120	16/1GIG/CD/DAT	3499

PERFORMAS

6400/200MHZ	16/2.4G/CD No Disp.	2289
6400/180MHZ	16/1.6G/CD No Disp.	2089
6300	16/1.2G/CD/28.8	1199*
6320	16/1GIG/CD/TV CARD	1999
6220	8/1GIG/CD/ No Disp.	1099*
6205	8/1GIG/CD NO Disp	1099*
6200	8/1GIG/CD NO Disp.	999*
6116	8/700/CD	1179/999*
5200	8/800/CD	1299/1199*
580	8/800	899
640CD DOS	12/500/CD	1399/999*
638CDV	8/250/CD/TV	999/899*
631	8/500	899*

POWERBOOKS

5300CE/117	32/1GIG	3799
5300C/100	16/750	2799
5300C/100	8/500	2299
5300CS/100	16/750	2299
5300CS/100	8/500	1849
5300/100	8/500	1149
190CS/66	8/500	1299
190CS/66	4/500	1199
190/66	MONO 8/500	899
520	8/240	879
520C Ref.	160 & 240	1199/1299
540C	4/320	1999*
540C	12/320/FAX	2099*
DUO 2300C	20/1.2GB/14.4	2295
DUO 2300C	8/750	1699
DUO 280	4/240 NO MANUEL	799
DUO 280	12/240/FAX	1399
DUO 280C	4/320	1299
DUO 280C	12/320/FAX	1499
150	8/250	669
150	4/250	599

Apple Printers

SW 1200/2200	199/299
SW 2400 Color	279/199*
SW 1500/2500	249/369
Apple Laser Select 300	499
Apple Personal Laser 320	599
Apple LaserWriter 4/600PS	699
Apple LaserWriter 12/640/PS	1489
Apple LaserWriter 12/600PSC	5299
Apple LaserWriter 16/600PS	2099

PRINTERS

5M color	10ppm color Laser	6999
5SIMX	24PPM LASER	3799
5M	12ppm 600dpi laser	1779
5MP	PS 600DPI Laser	899
4MV	11x17 Laser	2699
DeskJet 1600CM	INKJET	1899
DeskWriter 680c	INKJET	359
Deskjet 850C	INKJET	449
Deskjet 855cxi	INKJET	499
DeskWriter 660C	INKJET	379
GCC ELITE XL 808		2599
GCC ELITE XL 616		2349
GCC ELITE XL 608		2099
GCC ELITE XL 1208		3899

APPLE Monitors

Apple Ms 14"	279/249*
Apple MS 15"	349/299*
Apple 1705 17"	669
Apple 1710AV / 1710	849/799
Apple Multiscan 20"	1699/1299*

SONY Monitors

Sony 15SF2 / 17SF2	399/749
Sony 15Sx/1425	429/299
Sony 17SE2 / 20SFII	949/1599

NEC Monitors

NEC 15XV+/17XV+	489/799
NEC M500 15"	549
NEC M700 17"	879
NEC 17XE / 17XP	999/1049
NEC 21XE / 21XP	1699/1899

PORTRAIT LABS

PORTRAIT DISPLAY 1700 .26	999
PORTRAIT DISPLAY 1700 .28	899

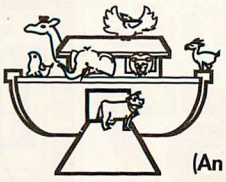
RADIUS

PRESSVIEW 21SR 21"	2999
SUPERMATH 21TXL	1199
PRECISION VIEW 17"	949
PRECISION VIEW 21"	1995
MULTIVIEW 21"	1499
RADIUS 15" COLOR PIVOT	399*
THUNDER COLOR 30/1600	1799
THUNDER COLOR 30/1152	1499
THUNDER 30/1600	1399
THUNDER 30/1152	1099
THUNDER 8/1600	429

UMAX

S900L 150MHZ CPU 16/2G/8XCD/4MB	3769
S900D 150MHZ CPU 16/0/8XCD	2899
VISTA S6E Photo Shop LE	399
VISTA S6 FULL PHOTO	599
VISTA S12 PHOTOSHOP LE	749
VISTA S12 MAC PRO II	829
POWERLOOK II FULL PHOTO	2899
POWERLOOK II	2099
GEMINI D-16 FULL PHOTO	1399
POWERLOOK 2000	4699

All prices are subject to change without notice. All prices are cash dicounted. An Asterisk "*" reflect refurbished.



The ARC

(An Apple Resource Center)

Computers, Software & Supplies

Buy, sell, repair & support Macintosh & Apple // Pre-Owned Hardware

1014 Central, Tracy, CA 95376
www.thearc.com

Info:(209)832-4300 **Order:**(800)753-0114 **Fax:**(209)832-3270

Mac ADDICT MARKETPLACE

A better machine. A better magazine.



The affordable and effective way to reach your market.

For information or space reservations call...
Mary LaChapelle (415) 468-4684 x417

Infinity Micro

RASTEROPS

2289 Westwood Blvd.
Los Angeles, CA 90064

800 • 589 • 1234

Tel:(310)470-9426
Fax:(310)470-4956

POWERMAC

6100/66 8/500/CD	1095.
6100/66 16/500/CD/DOS	1295.
7100/80 8/700/CD	1295.
8100/80 16/700/CD	1595.
8100/100 8/700	1845.
8100/100 16/1GIG/CD	2195.
8100/100AV 16/1G/CD	2295.
8100/110 16/2G/CD	2495.
7200/75 8/500/4XCD	1095.
7200/90 8/500/4XCD	1395.
7200/120 8/1G/4XCD	1695.
7200/120 16/1.2/4XCD/2	1845.
7200/120 16./1.2/8XCD	1945.
7200/120 8/1.2/4CD/PENT.	2395.
7500/100 16/1G/4XCD	1695.
7600/120 16/1.2G/4XCD	2295.
7600/132 16/1.2/8XCD	2695.
8500/120 16/1G/4XCD	2295.
8500/132 16/1G/4XCD	2595.
8500/150 16/2G/8XCD	2895.
8500/180 32/2GIG/8XCD	3985.
9500/120 16/1G/4XCD	2095.
9500/132 16/1G/4XCD	2395.
9500/150 16/2G/4XCD	3595.
9500/180MP 32/2G/8XCD	4495.
9500/200 32/2GIG/8XCD	5295.

W.G. SERVER'S

9150/120 16/2GG/CD	$ 2699.
7250/120 16/1.2/CD	$ 2595.
8550/132 24/2G/CD	$ 4495.
8550/132 24/2G/CD/DT	$ 6845.
500/132 32/2G/CD	$ 7845.
500/132 32/2G/CD/DAT	$ 9245.
700/150 32/1G/CD	$ 9999.
700/150 48/4G/CD/DAT	$12985.

Seagate

2.4GIG Barracuda.	$695.
4GIG Barracuda.	$1045.
Seagate 9G ELITE	$1845.

PERFORMA

580 8/800/KB	895.
580 8/800/CD/KB	995.
5215 8/1G/CD/14.4	1295.
5260 16/800/CD	1395.
5320 16/1GIG	1895.
640DOS 12/500/CD	1295.
6116 8/700/CD/14"	1295.
6200 8/1G/CD/14"	1395.
6220CD 16/1G/CD	1295.
6300 16/1.2/CD/15"	1645.
6320CD 16/1G/CD	1895.
6400/180 32/2G/CD	1895.
6400/200 16/2.4/CD	2195.

MONITORS

Apple 14" Multiscan	$ 249.
Apple 14"AudioVision	$ 289.
Apple 15" Mutiscan (R)	$299.
Apple 17" Multiscan	$695.
Apple 1705/1710	$659./$835.
Apple 20" Multiscan	$1395.
Radius Color Pivot 15	$375.
Radius PrecisionColor/17	$645.
Radius Intellicolor 20e	$1195.
SUPERMATCH 21TXL	$1195.
PRESSVIEW 17SR	$1895.
Sony 15SFII/17SFII	$395./$759.
Sony 17SE2/20SFII	$975./1595.
Precision Color 24/1600	$499.
Thunder30-1600	$995.
Thunder Color/30-1152	$1495.
Thunder Color/30-1600	$1695
Thunder Power/30-1920	$1645.
TrueVision Targa 1000	$2195.
TrueVision Targa 2000	$3295.
TrueVision Taga 2000PRO	$4095.
Number 9 Imagine 128/4MB	$625.
Number 9 Imagine 128/8MB	$1095.
IMS Twin Turbo 8MB PCI	$795.
ATI 4MB GRAPHICS PRO	$249.

POWERBOOK

150 8/240	$ 649.
190 8/500	$ 895.
190CS 8/500	$1395.
280C 4/500	$1295.
280C 12/500/Modem	$1695.
2300C 8/750	$1495.
2300C 20/1GB	$2395.
520 8/240	$ 795.
520C 4/240	$1245.
540C 4/320	$CALL.
540C 12/320/19.2	$2595.
5300 8/500 MONO	$1395.
5300CS 8/500	$2195.
5300CS 16/750	$2895.
5300C 8/500	$2495.
5300C 16/750	$2995.
5300CE 32/2GIG/117	$3895.

QMS

AGFA STUDIO SCAN IISI	$845.
AGFA ARCUS II W. TRANS	$1745.
EPSON ES-1000C COLOR	$699.
EPSON ES-1200C PRO	$1085.
HP SCANJET 4C COLOR	$895.
MICROTEK SCANMKR.E3	$369.
MICROTEK SCANMKR.E6	$545.
SCANMAKER E6 PRO	$765.
SCANMAKER III	$1729.
SCANMAKER IIHR	$569.
VISIONEER PAPERPORTVX	$295.
UMAX POWERLOOK II	$2049.
UMAX POWERLOOK II PRO	$2235.

SYQUEST & MEDIA

SYQUEST 200MB W. 1 CART.	$375.
IOMEGA ZIP DRIVE	$189.
IOMEGA JAZZ DRIVE W. 1 CART	$449.
SONY 4GIG DAT TAPE BACKUP	$795.
SONY 8GIG DAT TAPE BACKUP	$795.
DLT 30GIG BACK UP SYSTEM	$3345.
NUBUS CARD F.CENTRIS 610	$49.
APPLE CD-600 EXT.	$149.
APPLE 100MHZ PENTIUM CARD	$795.
MACALLEY EXTENDED KB	$59.
Performa 476 W. monitor	$745.

Sales:(818)787-3282

Visit Us on Internet
http://www.compu-d.com
E-Mail:csales@compu-d.com

COMPU.D
International, Inc.

1-800-929-9333

Fax:(818)787-5555
Fax Back:(818)787-4548

FedEx DHL VISA MasterCard

All Prices Are Based on C.O.D. Order & Subject To Change!

PowerMacs

7200/120 16-1.2GB, 4xCD	$1890
7200/120PC 16-1.2GB, 4xCD DOS	$2390
7200/120 16-1.2GB, 8xCD	$2045
7600/120 16-1.2GB, 4xCD	$2175
7600/132 16-1.2GB, 8xCD	$2695
8500/132 16-1GB, 4xCD	$2545
8500/120 16-1GB, 4xCD	$2425
8500/150 16-2GB, CD	$2799
9500/120 16-2GB, CD	$2245
9500/150 16-2GB, CD	$3445
9500/200 & 8500/180 32-2GB, CD	CALL/$4044

Performa

6400/200 16/2.4GB 8xCD	$2249
6400/180 16/1.6GB 8xCD	$1975
6320/120 8/1.2GB CD	$1599
*6300/100 8/1GB CD	$1245*
6220/75 16/1GB CD (TV, Keyboard, Modem)	$1195
*6220/75 16/1GB CD (TV, Keyboard, Modem)	$1095*
6200/75 8/800 CD	$1095
5320/120 16/800 CD	$1795
5200/75 8/800 CD (Keyboard)	$1195
Apple TV Card (for Performa models)	$99
Apple DOS Card (for Performa models & 6100)	$185

PowerBooks

5300ce 32-1GB	$3795
5300cs/5300c 16-750	$2485/2895
150/520 8-240	$655/795
190/190cs 8-500	$895/1285
DUO 230 4-80/8-240	$495/645
DUO 2300C 8-750 Modem	$1549
DUO 2300C 8-750 Modem with Dock+	$1999
DUO 2300C 20-1.1GB	$2249
DUO 280C 12-320 Modem	$1645
DUO Floppy & Adaptor	$199
250/500/810MB 2.5" HD IDE	$125/225/295

Monitors & Printers

Multiple Scan 15/15* Color Monitors	$339/269
Multiple Scan1705/1710/1710AV/20"	$645/795/895/1675
Color LaserWriter 12/600 PS & 4/600	$5395/695
StyleWriter 1200/1500/2200 Prt./2500	$185/285/289/345

SONY

15SX1 15" / 17SF2 17" / 17SE2 17" 0.25 dpi	$385/725/845
20SF2 20" 1600x1200 Resolution	$1595

NEC XV 15+ 15"/ XV 17+ 17" Color 0.28dpi $449/695

ViewSonic

15G, 15" Color 0.28dpi	$395
17GA 15" 0.27dpi W/Sound	$685
20G 20" 0.25dpi W/Sound	$1695

EPSON Stylus Color Printer C137001
720dpi, 4ppm Mac & PC $235

Specials

Duo 2300C/100 MHz $2845
20/1.1GB, Fax/Modem, Duo Dock+, Apple15"
PowerBook 150 8/250 $625

Printers HEWLETT PACKARD **Scanners**

LaserJet 6MP 8ppm, 600dpi, PS.L2	$895
LaserJet 5M 12ppm, 600dpi, PS.L2	$1669
DeskJet 870Cxi 8ppm, Clr. 600dpi	$469
DeskJet 1600CM 9ppm, 6MB, PSL2	$1725
ScanJet 4C/4P Color Scanners	$799/475

UMAX Scanners

UC840 6400dpi, 24bit color	$325
UC1200SE 9600dpi, 30bit color	$749
Vista S12 9600dpi, 1 Pass color	$675
PowerLook II w/Transparency	$1999

* Factory Reconditioned with Warranty

Removable Storage

Iomega 100MB Zip Drive / Crtdge. 10 pack	$195/135
Iomega 1GB Jaz Drive / Crtdge. 5 pack	$495/450
SyQuest 200MB Ext. w/Ct.	$299
MaxOptics 1GB MO Ext.	$699

WACOM Graphic Tablets

ArtPad II 4x5, w/Adobe Illustrator	$349
ArtZ II 6x8, w/Adobe Photoshop	$599
ArtZ II 12x12, w/Adobe PageMaker	$749

Software

MS Office 4.2.1	$345	Photoshop 3.06	$375
MS Excel 5.0	$195	Illustrator 5.5	$275
MS Word 6.0.1	$199	PageMaker 6.0	$365
Wordperfect 3.1	$199	Freehand 5.5	$265
AppleShare	$645	QuarkXpress3.32	$645

Ad No. 1296 MACAD

Personal & Business Leasing PFO CAPITAL

The LLB Company, Inc.

1-800-848-8967

International: 206.746.0229 WEB SITE: HTTP://llb.com Fax: 206.746.5168

MODEMS

GLOBAL VILLAGE

Teleport Platinum 28.8 V.34	$205
PowerPort 1XX Platinum 28.8 V.34	339
PowerPort Platinum PC Card 28.8	349
PowerPort Platinum PRO PC Card	519

Supra Corporation

SUPRA Simple Internet 28.8 Ext.	$159
SUPRA SONIC 33.6 v.34 w/voice	275
SUPRA 33.6 PB FAX Modem	149
SUPRA EXPRESS 28.8	149

US Robotics® The Intelligent Choice in Data Communications

28.8 Sportster V.34 Internet Bundle	$175
Sportster14,400 Mac & Fax	72
28.8 V.Everything Sportster	389

TDK

28.8 V.34 PCMCIA PB190/5300	$259

Motorola

Modemsurfer 28.8 V.34	$169
Power 28.8 V.34	270
ISDN Bitsurfer Pro	369

MEMORY

LIFETIME WARRANTY

8MB 72PIN $65

Standard 30-pin SIMMs	
2MB	$30
4MB	45
8MB 70NS	179
16MB 70NS	295

30-pin, 9 bit PC SIMMS	
1MB 70NS	$30
4MB 70NS	65

4MB PAL SIMMs for II,IIx	
4MB 70NS	$99

64-pin SIMMs for IIfx	
1MB 70NS	$43
4MB 70NS	59
8MB 70NS	99
16MB 70NS	179

72-pin SIMMs	
4MB 70/60NS	$30/36
8MB 70/60NS	62/67
16MB 70/60NS	133/137
32MB 60NS	249

72-pin, 36 bit PC SIMMS	
4MB 70NS/EDO	$69/75
8MB 70NS/EDO	189/75
16MB 70NS/EDO	160/146
32MB 70NS/EDO	292

168-pin DIMMs	
8MB 60NS	75
16MB 60NS	132
32MB 60NS	273
64MB 60NS	537

PB 5300 Series	
8MB/12MB RAM	$130/196
16MB/32MB RAM	228/485

PB 190 Series	
4MB/8MB 70NS	$95/149
12MB/16MB 70NS	205/215
32MB70NS	385

PB500 Series	
4MB/8MB RAM	$74/115
16MB/32MB RAM	194/360

PBDUO 210/230 Series	
PB DUO-8/12MB	$159/179
PB DUO-20/32MB	279/385

PB2300 Series	
PB2300 -16/20MB	$199/280
PB2300-36/48MB	389/559

MAJOR BRAND MEMORY ONLY.

MEDIA

CDR 10 PK $73

SONY

Magneto Optical Disks

5.25" MO 1.3GB 1024k b/s / 1.2GB 512k b/s	$59
5.25" MO 650MB 1024k b/s / 594MB 512k b/s	52
3.5" MO 230MB 3-pack/Mac Formatted	55/60
3.5" MO 128MB 3-pack/Mac Formatted	44/50
SONY CD-Recordable	
74 Min 4x 650MB-10 Pack	$73
74 Min 4x 650MB	8

Verbatim

Verbatim Syquest 44MB Cartridge - Mac	$38
Verbatim Syquest 88MB Cartridge - Mac	$44
5.25" MO 2.6GB 1024k b/s / 2.3GB 512k b/s	$79/79
5.25" MO 640MB1024k b/s / 540mb 512k b/s	$42/42

iomega

Iomega ZIP Cartridge 100MB	$19
- 3pack	49.50
- 10 Pack	139
Iomega Jaz 1GB Cartridge	123
- 5 pack	479
Iomega Jaz 540MB Cartridge	69
- 5 pack	294

SyQuest®

EZ135 CARTRIDGES

SINGLE	$19.50
- 5pack	96.25
- 10Pack	190.00

EZ FLYER 230MB CARTRIDGES

SINGLE	$29.50
- 3pack	80.95
- 5pack	124.00
- 10Pack	238.00

NEW!

The Original SyQuest Cartridge



	1-4	5-9	10+
44MB 5.25"	$40	$39	$38
88MB 5.25"	$43	$42	$41
200MB 5.25"	$63		$62
270MB 3.5"	$49	$48	$47
105MB 3.5"	$55		$54

DRIVES

APPLE

1.2GB ... 435	2GIG .. 765	4GB .. 1089	

QUANTUM

1.2GB Ext. Fireball	$359	UltraStar 2.1 GB	599
Atlas 4.3 GB 8.6 MS	1039		

200MB SyQuest w/Cart	199

NEC

6XE Multi-Spin CD-ROM Drive	$519
4XC 7CD Changer	369

FWB

2X CD Recorder/Writer	$1375
4X CD Recorder/Writer	1999

SyQuest EZ135 W/Cartridge	187
Syquest EZFlyer 230	295

iomega

Iomega Zip Drive	$199
Jaz 1.0GB Drive	499

PINNACLE MICRO

RCD1000 w/10 Recordable CD's	$1295
RCD5020 Ext. CD Recorder	1265
APEX 4.6GB Optical Drive	1589

What type of Memory do I need?

Standard 30-Pin Simms:
Plus, SE, SE 30, Classic, Classic II, Color Classic, LC, LCII, Performa 200, Performa 400-430, Performa 600, Quadra 900/950, Mac II, IIx, IIcx, IIsi, IIci, IIfx, IIvx, IIvi.

Standard 72-Pin Simms:
Quadra 605/630, 610, 650, 700, 800/840AV, LCIII, LC475, LC630, Performa 450-560, 575 and 6115CD, PowerMac 6100, 7100, 8100, WS 80, WS60, WS 95, WS 6150 and WS 8150, 9150.

168 Pin Dimms:
PowerMac 9500, 8500, 7500, 7200, 7600

FPU/COPROCESSOR/VRAM

FPU's/Math CoProcessors	
Centris FPU 25MHz	$189
FPU 33MHZ DUO/P600	52
FPU Color Classic 16MHZ	44
LC575 33MHZ Math CoProc.	240

VRAM/CACHE	
256K 80NS Video RAM	$17
512K Video RAM	22
256K/512K Cache Card	72/282
1MB Cache Card	792

1MB VRAM PM72/75/8500	$55
2MB VRAM PM 9500	186
256K Cache Dimm	87
512K Cache Dimm	150
1MB Cache Dimm	269

ACCELERATORS

DAYSTAR DIGITAL

Turbo 040 40MHZ w/cache	$679
Turbo 040i 33MHZ w/cache no FPU	609
PowerPro 601 100MHZ w/cache	1240
Turbo 601 100 MHZ w/adapter	1175
PowerCard 601 100MHZ	959

SONNET

Quad Doubler 40MHZ Centris61 0	235
Quad Doubler 40MHZ w/FPU Centris 61 0	345
Quad Doubler 50MHZ w/FPU Quadra 610	390
Quad Doubler 50MHZ w/FPU Centris 650	390
Quad Doubler 50 MHZ Centris 660AV/7/900	390

!!!NEW!!!

UMAX®

SUPERmac® S900

MacOS™ Compatible

150MHz 604 PowerPC Processor
512K L2 Cache
16MB RAM (expandable to 1GB)
2GB Int. Fast-SCSI Hard Drive *(S900L only)*
8X Int. CD ROM Drive
IMS Twin Turbo 128-bit 4MB
VRAM PCI display board *(S900L only)*
16-bit Stereo sound
and much more... call for details!

SUPERmac® S900L .. $3995
SUPERmac® S900D* . $3095
(No hard drive or graphics card)*

PRINTERS

APPLE

Color Stylewriter Pro	$415
Laserwriter 4/600	895
Personal Laserwriter 320	809

HEWLETT® PACKARD

HP 4MV	$2840
HP 5MP	1045
HP Deskjet 855CXI	509
HP DeskWriter 680C	319

—EPSON—

STYLUS COLOR II PRINTER	$319
STYLUS COLOR PRO XL PRINTER	1825

SCANNERS

EPSON 1200C PRO	$1202
VISIONEER PaperPortVX for Mac	295

NIKON

CoolScan II External	1125
Super CoolScan	1999
AGFA StudioScan IISI	795
ARCUS II	1941
POLAROID SPRINTSCAN	1555

UMAX®

POWERLOOK 200 - Full Photoshop	$4154
POWERLOOK II - Full Photoshop	1744
VISTA S-12 - Full Photoshop	898
VISTA S-6 E - Photoshop LE	534

FREE CATALOG!

1.800.848.8967

E-Mail us!

Electronic orders:
E-Mail us: 73423.1272
@Compuserve.com

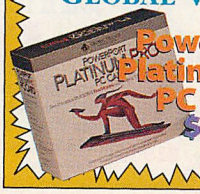
- P.O.'s accepted upon approval
- All major credit cards accepted - No surcharge - when shipped
- Prices subject to change, not responsible for errors
- We export to most countries in the world
- Orders received before 8:00 pm EST weekdays shipped same day
- Open 6am to 7pm M-F 9am to 4pm Saturdays
- Returns subject to a 15% restocking fee

The LLB Company, Inc. 13228 NE 20th St., Suite B, Bellevue, WA 98005

AIRBORNE EXPRESS OVERNIGHT

$7 up to 7 lbs

GLOBAL VILLAGE



PowerPort Platinum Pro PC Card $519

SyQuest®

EZ Flyer 230 $295

SONY®

Optical 3-Packs



128MB	44
Mac Form.	50
230MB	55
Mac Form...	60

AD1096

UNITED COMPUTER EXCHANGE

A Global Network for buyers & sellers of Used Macintosh equipment.

1-800-755-3033

Inter: (770) 612-1205
Fax: (770) 612-1239

Check out the OnLine Exchange www.uce.com

BUYERS

- Large selection of over 20,000 seller listings to choose from!
- All equipment is thoroughly tested, serviced & cleaned.
- Buyers have a two-day escrow period to check equipment.
- Bonded, licensed, and insured, escrow agents.

SELLERS

- No fee for listing equipment.
- Quick turn-around on payment.
- List and browse equipment for sale on our web page. (www.uce.com)
- Retrieve price indexes on fax info line. (770) 955-0569

Open 9-7 pm M-F ET

Get emergency access to any Mac file!

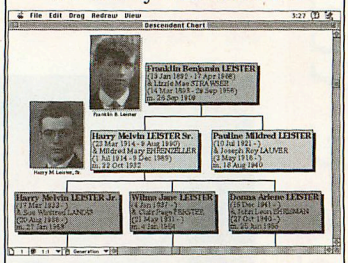
CanOpener 3.5



ONLY $65

Celebrating 7 years on the MAC!
Copy text & pictures from ANY file!
Read foreign files!
Recover text from damaged files!
Read over 30 picture formats including Mac, Windows and Web!
Convert pictures between formats!
Extract email and Web addresses from any file!
FREE!.. FREE!
Order now and get FREE RescueTXT (a $29 value!)
+ FREE Shipping in US (Int. $6)
1-800-552-9157
email info@abbottsys.com
fax 914-747-9115
ABBOTT SYSTEMS
Visit us on the Web!
www.abbottsys.com

REUNION®
the family tree software



Rated best by MacWorld, MacUser, Computer Life, and Mac Home Journal!

- Creates large, graphic tree charts
- Displays color pictures and legal documents • Identifies relationships
- Creates family histories, family group sheets, calendars, mailing lists, mail-merge files, much more. • Visit our Web site to read reviews and download a free demo: www.LeisterPro.com

Free demo also available on CompuServe and AOL. To order, call MacConnection 1-800-334-4444.

the BEST of EVERYTHING ★★★★★ Computer Life

MacUser

Leister Productions
P.O. Box 289, Mechanicsburg, PA 17055
Phone 717-697-1378 Fax 717-697-4373
CompuServe 74774,1626 America Online

NEW • NEW • NEW • NEW • NEW • NEW

MorePower For your PowerMac!

visit us on the web@ http://www.owcomputing.com

OtherWorld Computing
SERVING THE MAC UNIVERSE SINCE 1988

We Accept School/Government/Corporate Purchase Orders.

OWC 120-168 MHZ. AfterBurner604 POWER MAC ACCELERATOR

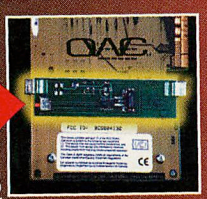
800-275-4576
Intnl: 815-338-8685 Fax: 815-338-4332
224 W. Judd St., Woodstock, IL 60098
E-Mail Us at: compsales@aol.com

VISA MasterCard AMERICAN EXPRESS DISCOVER C.O.D. FedEx Federal Express

No Credit Card Surcharge at OWC
Open: 9am-7pm M-F / 10am-4pm Sat. CST

OWC AfterBurner604

Now Accelerate your 72/75/85/9500 PCI PowerMac from 120 up to 168 Mhz! The cool new OWC AfterBurner604 is designed to be the easiest way to crank more power out of your PMac processor. Unlike other accelerators, once installed, the speed of the OWC AfterBurner604 can be easily adjusted without removing the processor card! $59.95



PowerMac Systems



7200/120	8/1.2GB/8XCD NEW!	$1799
7600/132	16/1.2GB/8XCD	$2599
8500/120	16/1G/4XCD	$2599
8500/132	16/1G/8XCD	$2849
8500/150	16/2G/8XCD	$3199
9500/150	32/2G/8XCD	**$3999

** INCLUDES 2MB ATI VIDEO CARD
Call for Custom Configs & PC Compatable CPUs and Cards

QUALITY HARD DRIVES

CAPACITY	INTERNAL	EXTERNAL
Quantum 540 Lightning 11 ms	$149	$199
IBM 2.16Gig UltraStar 8.5ms	$359	$409
Quantum Atlas 2.1Gig 8ms	$499	$549
Quantum Atlas 4.3Gig 8ms	$849	$899

Call for full line of 2.5" & 3.5" IDE Hard Drives.

30-Day Money Back Guarantee on All Hard Drives. System 7.1 Installed & 30mb of free software. External version features platinum case with dual SCSI ports, push-button SCSI ID & 40watt power.

CALL FOR THE NEW SUPERMAC LINE OF POWER PC'S!

Performa 5260	System	$1499
Performa 6400	180Mhz	$2299
Performa 6400	200Mhz	$2699

CALL FOR POWERBOOK PRICING.



IBM 2.16 GIG 8.5ms UltraStar $359! INTERNAL

OWC Rocket 84 Mhz



Accelerate your PMac 61/7100 and Performa 61XX up to 84 Mhz! Quick, Easy Safe Installation • Dual Color LED's Indicate Correct Installation Quiet Fan Keeps CPU at Optimum Temperature • 1000's of Satisfied Users $49.95

MONITORS



Apple 14" Multiscan	$299
Apple 15" Multiscan	$379
Apple Multiscan 1705	$699
Apple Multiscan 1710AV	$979
Apple Multiscan 20"	$1849
ViewSonic 17GS .27dp Multiscan	$699
ViewSonic 17GA .27dp A/V Display (MacUser)	$749
ViewSonic 21PS .25dp Pro Display	$1649
Sony SF2 17" Trinitron	$799
Sony SF2 20" Trinitron	$1799

Memory

TOP QUALITY MEMORY AT ROCK BOTTOM PRICES!

604 Processor Cards
For PCI PMac 75/76/85/95, & PowerComputing 604 Computers
132mhz 604 $449 150mhz 604 $549
180mhz 604e $799 CASH BACK FOR YOUR OLD PROCESSOR CARD!

L2 CACHE
PCI PMac 72/75/76/85/9500
256k $79 512k $129
Nubus PMac 61/71/8100
256k $59
OWC Rocket & 256k Cache Bundle for PMac 61/71/8100 $99

VRAM
PMac 7100/Q800/650
256k $19
PMac 72/75/76/8500
1mb $45
PMac 9500 ATI XClaim
2mb Upgrade $139
Apple PCI Dos Card
1mb Upgrade $24



KEYBOARDS
Apple Extended Keyboard II . $149
Apple Design Keyboard $80
MacAlly Extended Keyboard . . $59

SIMMS NEW MEMORY WITH LIFETIME WARRANTY

72 PIN 2K REFRESH

4mb	70ns	$28	60ns	$29
8mb	70ns	$48	60ns	$49
16mb	70ns	$114	60ns	$115
32mb	70ns	$218	60ns	$219

30 PIN

1mb	80ns	$11	"MEMORIZE"	
2mb	70ns	$22	NOW!	
4mb	70ns	$36		



DIMMS 168 PIN 2K REFRESH 60ns

8mb	$55
16mb	$109
32mb	$229
64mb	$439

visit our web site or call us for info on other great OWC Specials.

Call 800-874-1354 • 24 Hrs x 7 Days a Wk

APS TECHNOLOGIES:

WHY YOU SHOULD BUY A MAC OS COMPUTER FROM APS

APS M·POWER

The Best Engineering – Motorola

- Motorola – manufacturer of the PowerPC processor – No one knows it better
- *M·Power* takes advantage of Motorola's quality processor technology, innovation & reliability

The Best Service and Support

- *M·Power* comes from the company you've known and trusted for years
- *M·Power* has the backing of APS' award-winning service and support

Exceptional Value

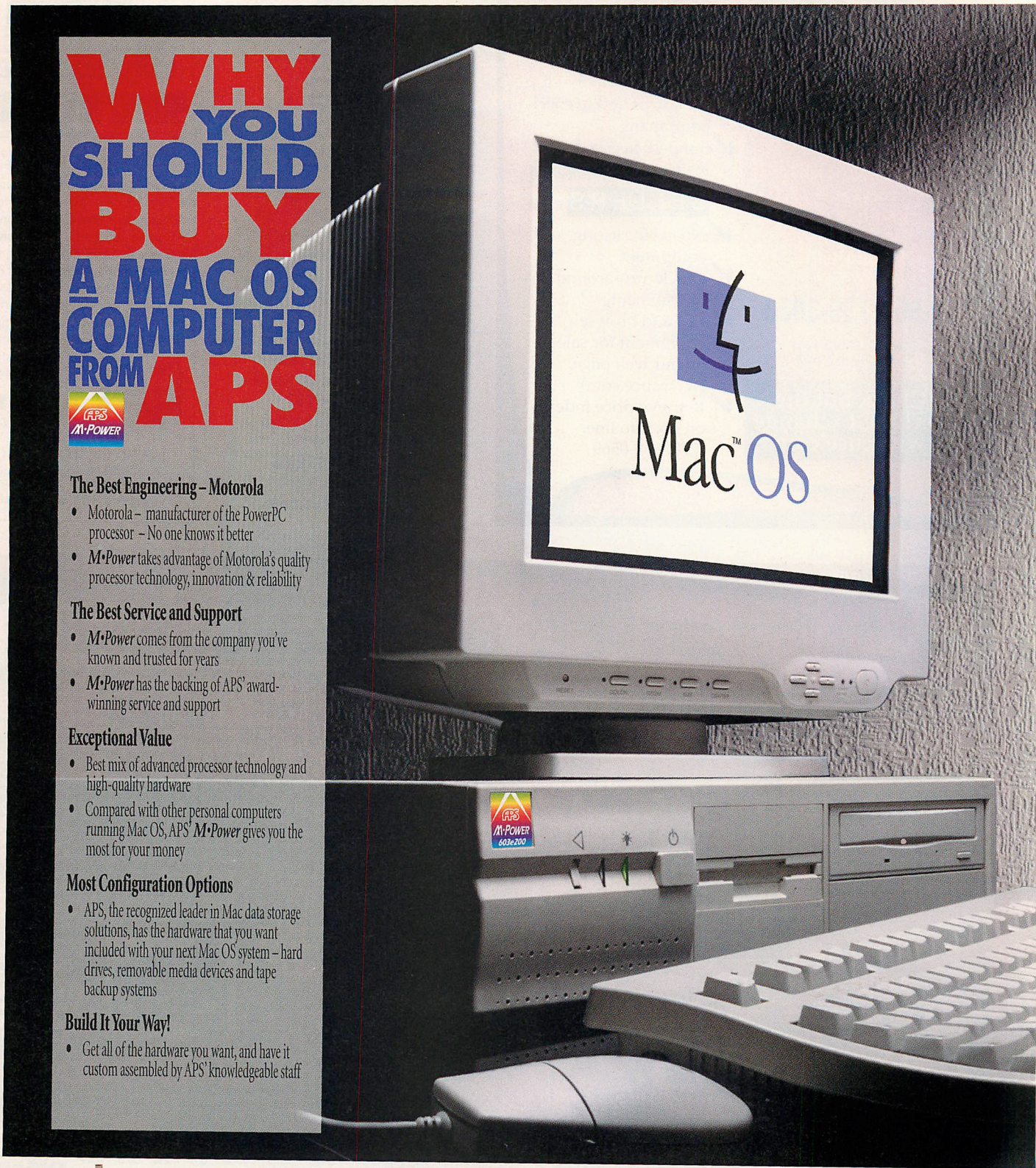
- Best mix of advanced processor technology and high-quality hardware
- Compared with other personal computers running Mac OS, APS' *M·Power* gives you the most for your money

Most Configuration Options

- APS, the recognized leader in Mac data storage solutions, has the hardware that you want included with your next Mac OS system – hard drives, removable media devices and tape backup systems

Build It Your Way!

- Get all of the hardware you want, and have it custom assembled by APS' knowledgeable staff



Macworld Magazine World Class Award

MacUser Editor's Choice Award

Consultants Choice Award

MW ★★★★ ◆◆◆◆ MacWEEK

BMUG

MAC HOME JOURNAL READERS' CHOICE

MACWORLD MW EDITORS' CHOICE

MACWORLD MW SERVICE HERO

World Class Winner Macworld

MacUser RECOMMENDS

Mac OS is a Registered Trademark of Apple® Computer.
Prices and specification are subject to change without notice. *Monitors are not included.

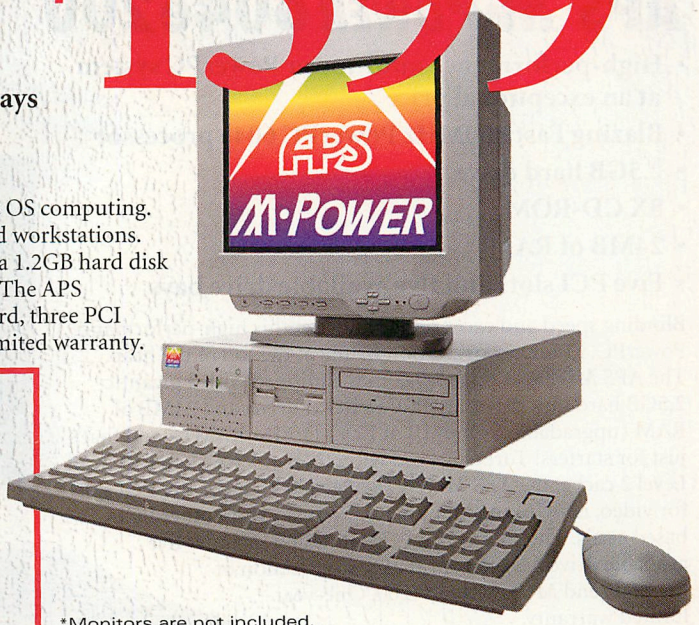
THE NAME TO REMEMBER IN MAC COMPATIBLE SYSTEMS

APS M•POWER 603e160™

$1399*

- THE best value in PowerPC Computing!
- 160MHz Motorola PowerPC 603e processor
- 16MB of RAM
- Three available PCI slots and three open 3.5" drive bays
- 1.2GB hard drive
- 8X CD-ROM

The APS *M•POWER* 603e160 is the new benchmark in PowerPC, Mac OS computing. Priced at under $1400, this is the absolute value leader in RISC-based workstations. This perfect home or mass application PowerPC computer includes a 1.2GB hard disk drive, an 8X CD-ROM, and 16MB (upgradable to 160MB) of RAM. The APS *M•POWER* 603e160 also includes a mouse and extended ADB keyboard, three PCI expansion card slots, and three available 3.5" drive bays. One-year limited warranty.



*Monitors are not included.

603e160

- 2-5.25" Internal Bays
- 3-3.5" Internal Bays
- 3-PCI Expansion Card Slots

INTERFACES

- Printer Port
- Modem Port
- ADB Port
- SVGA Monitor Port
- Supports 14", 15", 17" & 21" Monitors
- SCSI Port
- 16-bit Sound Output Port
- Rear Headphone Jack
- Microphone Jack

INCLUDES:

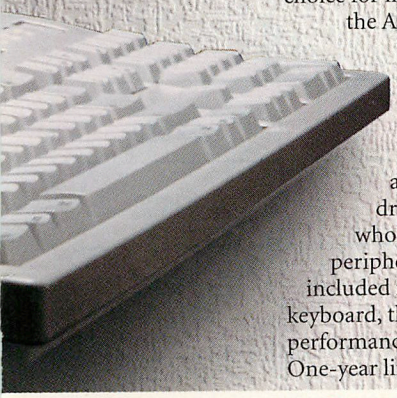
- 8x CD-ROM
- 16MB RAM
- 1.2GB HD
- Floppy Drive
- 1MB VRAM
- ADB Keyboard & Mouse
- One-Year Limited Warranty
- Desktop Case

APS M•POWER 603e200™

$1599*

*Monitors are not included.

- The ideal mix of performance and value
- 200MHz Motorola PowerPC 603e processor
- 16MB of RAM
- Three available PCI slots and three open 3.5" drive bays
- 1.2GB hard drive
- 8X CD-ROM



Outstanding performance at a terrific price, the APS *M•POWER* 603e200 is the bang-for-the-buck system of choice for individual and institutional users alike. Powered by Motorola's 200MHz PowerPC 603e processor, the APS *M•POWER* 603e200 comes ready for action with a 1.2GB hard drive, and 8X CD-ROM. Run most applications in the installed 16MB of system RAM (upgradable to 160MB) and enjoy the exceptional performance afforded by the 256KB of Level 2 cache and 1MB of VRAM. Three PCI slots and three available 3.5" drive bays let you add a whole range of PCI card and peripheral options. With the included mouse and extended ADB keyboard, this is the value-priced performance system of choice. One-year limited warranty.

603e200

- 2-5.25" Internal Bays
- 3-3.5" Internal Bays
- 3-PCI Expansion Slots

INTERFACES

- Printer Port
- Modem Port
- ADB Port
- SVGA Monitor Port
- Supports 14", 15", 17" & 21" Monitors
- SCSI Port
- 16-bit Sound Output Port
- Rear Headphone Jack
- Microphone Jack

INCLUDES:

- 8x CD-ROM
- 16MB RAM
- 1.2GB HD
- Floppy Drive
- 1MB VRAM
- 256K L2 Cache
- ADB Keyboard & Mouse
- Desktop Case

Don't see a system that fits your needs? Build it your way! Turn the page

Ref. No. 281001

VISA MasterCard DISCOVER AMERICAN EXPRESS Card TeleCheck

Visa, MasterCard, Discover, American Express: No Surcharge
Same day shipping for personal checks (Restrictions apply)

Call 800-874-1354

Visit our Web Page at http://www.apstech.com/
International Sales: (816) 920-4109

APS Technologies

Call 800-874-1354 • 24 Hrs x 7 Days a Wk

Call 800-874-1354 • 24 Hrs x 7 Days a Wk

APS TECHNOLOGIES:

APS *M•POWER* 604e200™

$2599*

- High-performance mini-tower PowerPC system at an exceptional price
- Blazing Fast 200MHz PowerPC 604e processor
- 2.5GB hard drive
- 8X CD-ROM
- 24MB of RAM
- Five PCI slots and five available drive bays

Blinding speed and exceptional value set this high-performance PowerPC, Mac OS workstation firmly at the top of the heap. The APS *M•POWER* 604e200 comes equipped with a gigantic 2.5GB hard disk drive, an 8X CD-ROM drive, and 24MB of RAM (upgradable to 160MB of EDO DIMM RAM) – and that's just for starters! Turbocharged with 2MB of VRAM and 512K of Level 2 cache, the APS *M•POWER* 604e200 includes five PCI slots for video, networking, peripheral expansion and other PCI-based cards. The roomy mini-tower design includes five available drive bays for optimal customization of the high-end *M•POWER* 604e200. One-year limited warranty.



*Monitors are not included.

604e200

- 4-5.25" Internal Bays
- 3-3.5" Internal Bays
- 5-PCI Expansion Slots

INTERFACES

- Printer Port
- Modem Port
- ADB Port
- Supports 14", 15", 17" & 21" Monitors
- SVGA Monitor Port
- SCSI Port
- 16-bit Sound Output Port
- Rear Headphone Jack
- Microphone Jack

INCLUDES:

- 8x CD-ROM
- 24MB RAM
- 2.5GB HD
- Floppy Drive
- 2MB VRAM
- 512K L2 Cache
- ADB Keyboard & Mouse
- One-Year Limited Warranty
- Mini-Tower Case

COMPARISON

	5.25" Intl. Bay's	3.5" Intl. Bay's	PCI Expansion Slots	Printer Port	Modem Port	ADB Port	ADB Keyboard & Mouse	PS/2 Ports	SVGA Monitor Port	Supports 14", 15", 17" & 21"	SCSI Bus	IDE Bus	16-bit Sound Output Port	Rear Headphone Jack	Microphone Jack	8X CD ROM	Hard Drive (GB)	EDO RAM	L2 Cache	VRAM (MB)	Floppy Drive	Price
APS 604e200 Tower Case	3	4	5	✓	✓	✓	✓	2	✓	✓	1†	✓	✓	✓	✓	✓	2.5	24	512K	2	✓	$2599
P.C. POWERTOWER 200e Tower Case	3	2	3	✓	✓	✓	✓	-	✓	✓	1	-	✓	✓	✓	✓	2	16	1MB	2	✓	$3595
PowerMac 9500/200 Tower Case	1	2	6	✓	✓	✓	✓	-	✓	✓	2	-	✓	✓	✓	✓	2	32	256K	2	✓	$4899

Comparison information for Power Computing taken from http://www.powercc.com
Comparison information for Apple taken from Apple ads and documentation

†Internal and external access

Macintosh & Mac OS are Registered Trademarks of Apple® Computer.
Prices and specifications are subject to change without notice. *Monitors are not included.

Macworld Magazine World Class Award · MacUser Editor's Choice Award · Consultants Choice Award

MW ★★★★ MacWEEK

1994 MAC HOME JOURNAL READERS' CHOICE · MACWORLD MW EDITORS' CHOICE · MACWORLD MW SERVICE HERO · MacUser RECOMMENDS

THE NAME TO REMEMBER IN MAC COMPATIBLE SYSTEMS

DON'T SEE A SYSTEM THAT FITS YOUR NEEDS? THEN BUILD YOUR OWN BOX

APS M-POWER

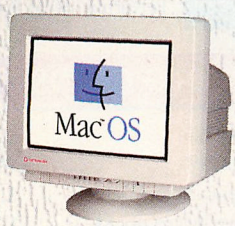
**Includes listed Motherboard, standard enclosure, floppy drive, ADB keyboard, ADB mouse. Minimal configured system.*

603e160	$999.00*	___.___	3GB IDE HD	449.95	___.___	VRAM 2MB	201.95	___.___
603e200	1199.00*	___.___	Q 1280	249.95	___.___	VRAM 4MB	460.95	___.___
604e200	1599.00*	___.___	Q 2100	349.95	___.___	256K L2 Cache	102.95	___.___
8X CD-ROM (IDE)	99.95	___.___	Q 3200	499.95	___.___	512K L2 Cache	171.95	___.___
8X CD-ROM (SCSI)	179.95	___.___	I 2160	399.95	___.___	**ETHERNET Card PCI Cards**		
CD-R Plus	549.95	___.___	MS 4300	999.95	___.___	10Base-T	69.95	___.___
CD-R Pro	899.95	___.___	MS 4300w	1099.95	___.___	10/100Base-T	169.95	___.___
CD Changer (IDE)	299.95	___.___	MS 9000	1420.95	___.___	**GRAPHIC Cards "IMS Twin Turbo-12M"**		
CD Changer (SCSI)	499.95	___.___	MS 9000w	1449.95	___.___	4MB	395.95	___.___
2.6GB MO	1699.95	___.___	**MONITORS**			8MB	659.95	___.___
HyperQIC™ (SCSI)	399.95	___.___	15" Monitor	399.95	___.___	**EXTERNAL Modem**		
ProDAT™	649.95	___.___	17" Monitor	699.95	___.___	28.6 BPS	199.95	___.___
HyperDAT™	949.95	___.___	20" Monitor	1299.95	___.___			
Jaz	399.95	___.___	**MEMORY**			**TOTAL**		___.___
M540	249.95	___.___	DRAM 8MB	94.95	___.___			
230MB MO	299.95	___.___	DRAM 16MB	177.95	___.___			
640MB MO	549.95	___.___	DRAM 32MB	345.95	___.___			
1.2GB IDE HD	199.95	___.___	DRAM 64MB	742.95	___.___			
2.5GB IDE HD	299.95	___.___	VRAM 1MB	86.95	___.___			

Techmedia TCM-1500N Color Monitor

- 15" CRT with a 13.7" viewable image area
- .28mm dot pitch
- Mac resolutions up to 1024 x 768 @ 75Hz
- Digital controls
- Three-year limited warranty

106724 $399.95



Techmedia TCM-1700G Color Monitor

- 17" CRT with a 15.9" viewable image area
- .28mm dot pitch
- Mac resolutions up to 1152 x 870 @ 75Hz
- Non-glare coating
- Three-year limited warranty

106725 $699.95



Techmedia TCM-2000G Color Monitor

- 20" CRT with a 18.75" viewable image area
- .28mm dot pitch
- Mac resolutions up to 1280 x 1024 @ 75Hz
- Non-glare coating
- Invar shadow mask
- Three-year limited warranty

106726 $1299.95



Sony Multiscan 17sfII Trinitron Graphic Display

- 17" Trinitron CRT with a 16" viewable image area
- Super Fine Pitch™ .25mm aperture grille
- Supports resolutions up to 1280 x 1024 @ 60Hz
- Vertically flat CRT
- Thin silica anti-reflective coating to minimize glare
- On-screen display of digital controls

106378 $799.95





Sony Multiscan 20sfII Trinitron Graphic Display

- 20" Trinitron CRT with a 19.1" viewable image area
- Super Fine Pitch™ .30mm aperture grille
- Supports resolutions up to 1600 x 1200 @ 60Hz
- Vertically flat CRT
- Bonded anti-reflective panel to reduce glare
- On-screen display of digital controls

106379 $1699.95

Price does not include shipping or sales tax. All prices subject to change without notice. Some of the prices listed in our print advertisements are specials and may not be reflected by the Build Your Own Box offer. Drive options are limited by available bays and power requirements. All Prices are in U.S. dollars and are for direct purchase only.

Ref. No. 281001

VISA MasterCard DISCOVER AMERICAN EXPRESS Card TeleCheck

Visa, MasterCard, Discover, American Express: No Surcharge
Same day shipping for personal checks (Restrictions apply)

Call 800-874-1354
Visit our Web Page at http://www.apstech.com/
International Sales: (816) 920-4109

APS Technologies

Call 800-874-1354 • 24 Hrs x 7 Days a Wk

Parts • Trades • Upgrades



Power Macintosh 9500/120
16/1GB/CD
INCLUDES ATI CARD



Quadra 950 8/500
Low-cost server solution!



Power Macintosh 7500/100
monitor & keyboard sold separately

Bargain Basement

MACINTOSH SYSTEM 7.5 CD	35.
1MB 30-pin 120ns SIMMS	12.
New Duo Type 1 Batteries	15.
Centris 650 Logic Board	**299.**
PowerBook 140-180 A/C adapter	49.
StyleWriter ink cartridges: 2 for	29
Quadra 840AV Logic Board	**499.**
ImageWriter LQ ribbon	6.
Quadra 800 Logic Board	**449.**
IIsi Power Supply	CALL
PowerBook Canvas Tote Case	19.
Quadra 950 Logic Board	**549.**
Quadra 660AV NuBus Adapter	49.
Quadra 660AV Logic Board	**399.**
Personal NT Logic Bd.	49.
Quadra 900 Logic Board	**449.**
Apple PowerCD Carrying Case	10.
40MB 1/3-height Hard Drive	39.



MAC LOGIC BOARD UPGRADES!

Personal NT to NTR printer upgrade	exchange $99
LaserWriter IINT/NTX to IIf	exchange $399 NT/299 NTX
Mac II or IIx to IIfx	exchange $299
Centris 610 to Quadra 660AV	exchange $199
Quadra 660AV to PowerMac 6100/60	exchange $699
Quadra 800/840AV to PowerMac 8100/80	exchange $999
Quadra 800 to Quadra 840AV	exchange $299
Quadra 650 to PowerMac 7100/66	exchange $799
LC550 to LC575	exchange $499
IIvx, IIcx/IIci to Centris 650	exchange $299
Performa 630 to PowerMac 6200	exchange $699

Macintosh CPUs

LC550 4/160	$599.
LC580 8/800/4XCD NEW	$1249.
Performa 635 4/250/CD	$799.
Performa 637 8/250/CD	$849.
PowerMac 6100 8/250/CD	$1099.
PowerMac 6200 8/1GB/CD	$1099.
Centris 650 4/0	$649.
Quadra 660AV 4/0	$599.
Quadra 840AV 0/0	$999.
Quadra 800 8/0	$899.
Quadra 950 8/500 NEW	$1199.
PowerMac 7500/100 16/1G/CD NEW	$2199.
PowerMac 9500/120 16/1GB/CD NEW	$2399.
PowerMac 9500/132 16/2GB/CD	$2799.
WGS 9150/120 16/2GB NEW	$2999.

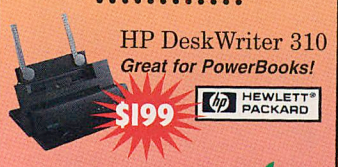
= *Factory Refurbished*

Accessories

6100 NUBUS ADAPTERS!

Hurry! Quantities Limited!

6100 series NuBus adapter	$299.
610 NuBus Adapter	$99.
660AV NuBus Adapter	$49.
Apple OneScanner	$279.
Apple Color OneScanner	$479.
HDI External 1.44 for PowerBooks	$149.
IIsi NuBus Adapter with math co-processor	$99.
Bernoulli 90PRO external	$69.



LaserWriter 4/600/PS
FACTORY REFURBISHED
REFURBISHED $649
TONER CARTRIDGE SOLD SEPARATELY



Video Cards

Apple 8-bit Card	$129.
RasterOps 24MX NEW	$199.
RasterOps PaintBoard Turbo NEW	$299.
E-Machines DoubleColor SX NEW	$129.
8100 series AV Card	$449.
7100 series AV Card	$349.
6100 series AV Card with PDS adapter	$549.

MONITORS

Apple 13" Trinitron	$269.
Apple 14" MultiScan	$279.
Apple 14" MultiScan NEW	$329.
Apple 14" AV NEW	$349.
Apple 15" MultiScan	$329.
Hewlett-Packard 17" with card	$649.
Hewlett-Packard 20" with card	$899.
Radius TPD 19" mono	$399.
Radius TPD 21" mono	$549
Radius PrecisionColor Display/20e	$1299.
Radius PrecisionColor Pivot	$549.

= *Factory Refurbished*

Printers

Apple StyleWriter 1200	$159.
Apple Personal LaserWriter LS	$299.
Apple Personal LaserWriter 300	$299.
Apple Personal LaserWriter 320	$449.
Apple Personal LaserWriter NT	$499.
Apple Personal LaserWriter NTR	$599.
Apple LaserWriter IINT	$699.
Apple LaserWriter IINTX	$899.
Apple LaserWriter Pro 630	$1199.
Apple LaserWriter Pro 630 NEW	$1499.
Apple LaserWriter 4/600PS	$649.
HP DeskWriter 310 NEW	$199.
Hewlett-Packard DeskWriter C	$249.
Hewlett-Packard DeskWriter 550c	$249.

Laser toner cartridges sold separately

PowerBooks

PowerBook 520 4/160	$849.
PowerBook 170 4/80	$799.
PowerBook 180 4/80	$999.
PowerBook 160 4/80	$699.
PowerBook 150 4/240 NEW	$699.
Duo 230 4/80	$499.
Duo 250 4/250	$799.
Duo 280 4/250	$999.

= *Factory Refurbished*

Best IN Parts!

SHREVE Systems



TO PLACE AN ORDER CALL

1•800•227•3971

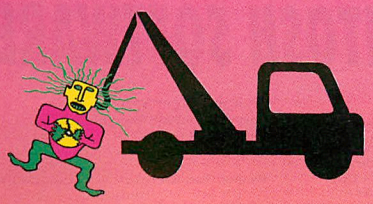
1200 Marshall St. • Shreveport LA 71101

ALL CREDIT CARDS STRICTLY VERIFIED

VISA MasterCard DISCOVER

FAX (318) 424.9771 • TECH (318) 424-7987
CUSTOMER SERVICE & ORDER INFO (318) 424.9791
PURCHASING & INFORMATION (318) 424.9791
HTTP://www.shrevesystems.com

Products are refurbished unless indicated as "new". Prices reflect a 2% cash discount and are subject to change without notice.



PUSH, PULL OR DRAG IT SALE!

1-800-227-3971

GET A ***$500 TRADE-IN*** ON YOUR OLD 25MHz '030 COLOR MAC SYSTEM
OR ***$500 TRADE-IN*** ON YOUR POWERBOOK!

DESKTOP TRADE-INS: working units only, minimum configuration 4/80, 20Mhz '030 processor, keyboard, mouse & color monitor
POWERBOOK TRADE-INS: working units only, minimum 4/80 configuration



PowerMac 6100/60
pictured with 14" AV

- factory refurbished
- 60MHz PowerPC™ 601
- 8MB RAM
- 350MB hard drive
- 2X Apple CD300i
- AppleDesign Extended Keyboard
- 14" Performa Plus Display
- Global Village Bronze Faxmodem

$1399.00
- $500 TRADE-IN
YOUR COST $899



PowerMac 5200/75LC

- factory refurbished
- 75MHz PowerPC™ 603
- 8MB RAM
- 500MB hard drive
- 4X Apple CD600i
- AppleDesign Extended Keyboard
- 14" Apple Display
- Internal Global Village 14.4 modem
- Built-in speakers

$1399.00
- $500 TRADE-IN
YOUR COST $899



Performa 6200/75

- factory refurbished
- 75MHz PowerPC™ 603
- 8MB RAM
- 1GB hard drive
- 4X Apple CD600i
- AppleDesign Extended Keyboard
- 15" Apple MultiScan Display
- Internal Global Village 14.4 modem

$1499.00
- $500 TRADE-IN
YOUR COST $999



Performa 6300/100

- factory refurbished
- 100MHz PowerPC™ 603e
- 16MB RAM
- 1.2GB hard drive
- 4X Apple CD600i
- AppleDesign Extended Keyboard
- 15" Apple Multiscan Display
- Internal Global Village 14.4 modem

$1799.00
- $500 TRADE-IN
YOUR COST $1299



PowerMac 7500/100

- factory refurbished
- 100MHz PowerPC™ 601+
- BUILT-IN A/V
- 16MB RAM
- 1GB hard drive
- 4X CD600i
- AppleDesign Extended Keyboard
- 15" Apple Multiscan Display

FREE! Avid VideoShop

$2499.00
- $500 TRADE-IN
YOUR COST $1999

Specials Specials Specials

Apple PowerBook 520c



- 4MB RAM
- 240MB Hard Drive
- dual-scan color display
- 25MHz '040

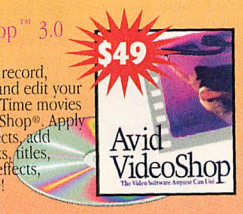
FACTORY REFURBISHED



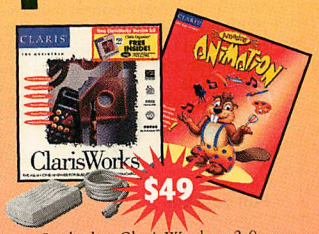
*with trade-in

Color StyleWriter Pro
REFURBISHED
Trade-in your working StyleWriter I or II for this incredible price!
$249 WITHOUT TRADE-IN

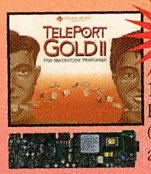
Avid VideoShop™ 3.0 CD-ROM



It's easy to record, assemble, and edit your own QuickTime movies with VideoShop®. Apply special effects, add soundtracks, titles, transition effects, it's all here!



Includes ClarisWorks™3.0, Claris Amazing Animation™, America Online and Global Village Bronze Faxmodem

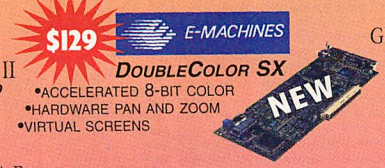




14.4 internal for Performa 630, 640,5200, 6200, and 6300 series



ADB Mouse II
REFURBISHED

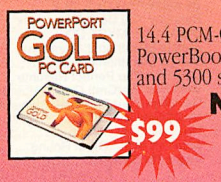




Apple QuickTake 150
REFURBISHED



1.44 DISK DRIVES
$129
661-0474 or 661-0121



14.4 PCM-CIA For PowerBook 190 and 5300 series
NEW





Original heavy-duty heat sink with electric cooling pump for PowerPC™ 601+ processors

THE CHIP CHILLER



Mountain.
7-DISC CD-ROM MINICHANGER
NEW



PowerBook 150 8/240
NEW • NEW • NEW



1•800•227•3971

Products are refurbished unless indicated as "new". Prices reflect a 2% cash discount and are subject to change without notice.

TOP SELLING MACINTOSH SOFTWARE

COMPUTER DISCOUNT WAREHOUSE™

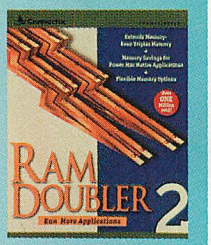
RAM Doubler 2

Connectix

$25 upgrade rebate*

This "must have" application triples your memory so you can run more applications and increase your productivity. Works with as little as 8MB or 84MB of memory.

$56.22
CDW 73962



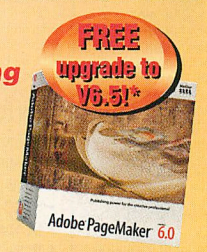
Owners of RAM Doubler V 1.x are eligible for a $25 mail-in manufacturer rebate. Offer valid through 12/31/96. Restrictions may apply.

PageMaker V6.0

Adobe

Expand your publishing capabilities

FREE upgrade to V6.5!*



Adobe PageMaker comes packed with extra value–a free Type On Call™ CD-ROM, with 220 fonts unlocked upon registration, and a free Deluxe CD-ROM, with Acrobat Distiller, Private Edition and much more.

Version upgrade **$132.81** CDW 57782

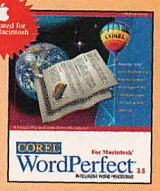
3.5" + CD **$545.78** CDW 57017

Purchase Adobe PageMaker V6.0 on or after 9/9/96 and receive a free upgrade to Adobe PageMaker 6.5. For more information, contact Adobe at 1-800-42-ADOBE (23623). Shipping charges apply. Adobe PageMaker V6.5 is expected to be available at the of October, 1996.

COREL WordPerfect® 3.5

Intelligent Word Processing

Accelerated for Power Macintosh



Corel WordPerfect offers intelligent features like QuickCorrect™ which automatically correct typos on the fly. Innovative new features like Internet publishing tools give Corel WordPerfect the ability to publish and translate HTML code for you.
◆ Bookmarks ◆ Ability to "Speak" Text using MacinTalk™ ◆ Make it Fit ◆ Apple Guide Support ◆ Macintosh Drag Manager ◆ QuickDraw GX Printing ◆ Easy Open

Version and competitive upgrade . . . . . **$79.51** CDW 71697

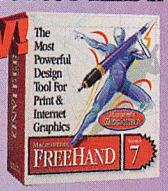
Full version . . . . . **$152.64** CDW 71946

FreeHand Graphics Studio V7.0 with Shockwave

MACROMEDIA

The most powerful design tools for print and Internet graphics

NEW



Unleash your creativity with Macromedia's FreeHand Graphics Studio 7 and Shockwave for state of the art design on the Internet. It includes FreeHand V7.0, the leading tool for design, illustration and page layout; Macromedia xRes V3.0, for fast, high-res image editing and creation; Extreme 3D, for fast 3D modeling, animation and photorealistic rendering; and Fontographer V4.1, the industry standard for type design.

Upgrade, CD . . . . . **$187.08** CDW 75616

Competitive upgrade, CD. . . . . . **$187.08** CDW 75617

Full version, CD . . . . . **$412.85** CDW 75615

Adobe

After Effects V3.1	624.72
Dimensions V2.0	126.67
Illustrator V6.0 (3.5" + CD)	378.45
Illustrator V6.0 upg 3.X to 6.0 (3.5" + CD)	114.98
Illustrator V6.0 upg 3.X to 6.0 (CD only)	89.96
Illustrator V6.0 upg 5.X to 6.0 (3.5" + CD)	114.98
Illustrator V6.0 upg 5.X to 6.0 (CD only)	89.96
PageMaker V6.0 (3.5" + CD)	545.78
PageMaker V6.0 upg	132.81
PageMill V2.0	94.93
Persuasion V3.0.2	243.28
PhotoDeluxe	81.20
Photoshop V3.0.5	545.78
Photoshop V3.0.5 vers upg	159.55
Premiere V4.2 CD	494.50
SiteMill V1.0	176.36
SiteMill V1.0 upg from PageMill V1.0	89.96
Streamline V3.0	123.11
Type Manager V4.0	47.45
Type Reunion Deluxe V2.0	44.44
Apple® Home Office Collection	26.77
Apple® System 7.5 upg	95.41
Apple® System 7.5.3 upg CD	94.72

PhotoDeluxe

Adobe

Make your photos simply amazing

$81.20
CDW 64743



Caere

Caere OmniForm Filler	173.47
Caere OmniPage Direct V2.0	57.70
Caere OmniPage Pro V6.0	459.02
Caere OmniPage Pro V6.0 upg	131.47

Casady & Greene

Conflict Catcher 3	58.54
Conflict Catcher 3 comp upg	34.91
Conflict Catcher 3 vers upg	34.68

Claris

Apple® Internet Connection Kit V1.1	45.17
Claris Emailer V1.1	41.79
Claris FileMaker Pro V3.0	179.14
Claris FileMaker Pro V3.0 upg	91.95
Claris Home Page	92.17
ClarisDraw V1.0	179.98
ClarisImpact V2.0	79.75
ClarisOrganizer V1.0v2 w/CLICKBOOK	44.53
ClarisWorks V4.0 CPU bundle	63.48
ClarisWorks V4.0 vers/comp upg	64.28
ClarisWorks V4.0 w/Internet	117.31

Connectix

PowerMac PowerPack/RAM & Speed Doubler	74.28
QuickCards V1.1 CD	31.79
RAM Doubler V2.0	56.22
Speed Doubler V1.1	55.45
VideoPhone (software only)	55.34

Corel

Corel CD Creator	154.42
Corel Stock Photo Library 1	879.10
Corel Stock Photo Library 2	868.05
Corel Stock Photo Library 3	881.30
Corel WordPerfect 3.5.1, CD	152.64
Corel WordPerfect 3.5.1 upg CD	79.51
CorelDRAW 6 Suite, CD	363.18
CorelDRAW 6 Suite upg CD	136.48
CA Cricket Graph III V1.53	92.00

SiteMill V1.0

Adobe

Web site management made easy

$176.36
CDW 64987



Dantz Retrospect Remote V3.0	136.09
Dataviz MacLink+/PC Connection	115.25
Datawatch Virex V5.6	61.34
Deneba Canvas V3.5 + CD	251.83

Edutainment

A.D.A.M. The Inside Story CD	35.97
Berkeley After Dark V3.2	32.62
Berkeley You Don't Know Jack	32.68
Broderbund MYST CD	49.04
Bungie Marathon 2: Durandal	42.39
Bungie Marathon CD	37.04
Davidson The Perfect Resume	38.79
Davidson WarCraft Orcs & Humans CD	31.14
Davidson Your Personal Trainer for SAT CD	34.80
Maxis SimCity 2000	33.42
Maxis SimCity Classic	19.12
ScruTiny in the Great Round	36.50
Virgin 7th Guest CD	31.17

Fractal Design

Dabbler V2.0	39.40
Detailer, CD	268.84
Painter V4.0	282.33
Painter V4.0 upg	122.16
Poser V1.0	89.28
Sketcher V1.0	39.36

FWB

CD-ROM ToolKit™ V2.0	49.88
Hard Disk ToolKit™ Personal V1.7.6	49.28
Hard Disk ToolKit™ V1.8	117.28
RAID ToolKit™	293.21
Farallon Timbuktu Pro V1.0	126.18

Insignia

MacTransfer for Windows 95 PCs	45.46
SoftWindows 95 CD	319.17
SoftWindows 95 upg CD	139.27
SoftWindows for Performa	113.86
SoftWindows V3.0 CD	287.05
SoftWindows V3.0 CD w/CPU purchase	183.20
SoftWindows V3.0 upg	67.02

Intuit

QuickBooks Pro V4.0	182.13
QuickBooks V4.0	111.19
Quicken Deluxe V6.0 CD	59.99
Quicken V6.0	44.53

Macromedia

Director Multimedia Studio V2.0 CD	893.40
Director Multimedia Studio V2.0 upg CD	458.73
Director V5.0 CD	817.78
Director V5.0 upg CD	366.91
Extreme 3D CD	444.60
Extreme 3D comp upg CD	181.69
Fontographer V4.1	314.38
FreeHand Graphics Studio V2.0 CD	405.63
FreeHand Graphics Studio V2.0 upg CD	276.06
FreeHand V5.5 CD	378.89
FreeHand V5.5 vers upg V4.0 or earlier CD	137.60
FreeHand V5.5 vers upg V5.0 to V5.5 CD	74.97
SoundEdit 16 V2.0 CD	264.62
SoundEdit 16 V2.0 plus DECK II CD	339.60
xRes V2.0 CD	446.04
xRes V2.0 comp upg CD	186.34

MetaTools

Bryce V2.0 CD	179.00
Convolver V1.0 CD	129.00
Kai's Power Goo CD	43.29
Kai's Power Tools 3 CD	129.00
Power Photos I CD	129.00
Power Photos II CD	129.00
Power Photos III CD	129.00
Power Photos IV CD	129.00
Vector Effects V1.0	129.00

SAM V4.5

SYMANTEC.

Maximum Internet virus protection

$64.17
CDW 75075



Metrowerks

CodeWarrior Gold 9	301.16
Discover Programming for Macintosh	59.59
Discover Programming with Java	73.83

Microsoft

Arcade V1.0	28.95
Bookshelf 96 CD	44.95
Cinemania 1996 CD	29.20
Encarta 1996 CD	44.94
Excel V5.0	296.94
Excel V5.0 upg	298.44
Flight Simulator V4.0	41.68
Office V4.2.1	449.03
Office V4.2.1 CD	449.31
Office V4.2.1 vers upg, CD	265.72
Office V4.2.1 vers upg	265.86
PowerPoint V4.0	296.94
PowerPoint V4.0 upg	114.98
Project V4.0	421.73
Project V4.0 upg	134.11
Visual FoxPro V3.0 CD	442.61
Visual FoxPro V3.0 upg CD	265.72
Wine Guide CD	29.20
Word V6.0.1	298.44
Word V6.0.1 vers upg	114.98
Works V4.0	45.13

NOW Software

Now Contact V3.6 CD	59.97
Now Contact/Up to Date V3.6 bundle CD	62.36
Now Startup Manager V7.0	65.76
Now Up-to-Date Web Publisher V1.0 CD	252.45
Now Utilities V6.5, CD	79.79

PRO CD

Select Phone 1996 Deluxe 97	123.78
Select Phone 1996 WIN/MAC CD	84.28

Quark

QuarkXPress V3.32 CD	661.23

Strata

Media Paint V1.1	403.97
Studio Pro BLITZ V1.75	816.26
Vision 3D V4.0	228.61

Symantec

ACT! V1.0 for Newton	92.07
ACT! V2.5	148.18
Norton Utilities V3.2	94.27
SAM AntiVirus V4.0	64.17
Suitcase V3.0	65.43
Symantec Cafe	89.68

NASDAQ

BUY WITH CONFIDENCE
CDW® IS A NASDAQ TRADED COMPANY
TICKER SYMBOL CDWC
D & B rated 5A1
Duns 10-762-7952

Credit card charges are not submitted until time of shipment. For your protection, we ship only to your credit card's verified billing address. Freight is calculated as the carrier's actual freight charge plus insurance and packaging material. The cost of insurance is 0.35% (0.0035) of the order total. Packaging materials will not exceed $4.00 for single package shipments or $6.00 for multi-package shipments. Before returning any product, you must obtain an RMA number. Non-defective returns are subject to a restocking fee. Software, chips and other electronic components are not returnable. Allow 10 business days for shipping when paying by personal check. All pricing subject to change. For all prices, products and offers, CDW reserves the right to make adjustments due to changing market conditions, product discontinuation, manufacturer price changes, errors in advertisements or other extenuating circumstances. All trademarks and registered trademarks are the sole property of their respective owners.

CDW® TELEPHONE HOURS

Sales
Monday-Friday 7am-9pm CST
Saturday 9am-5pm CST

Tech Support for Customers
Monday-Friday 8am-9pm CST
Saturday 9am-5pm CST

If you find a better price, call CDW® before you buy

Fax: 847-465-6800
Sales: 800-653-4239 (4CDW)

©1996 CDW® Computer Centers, Inc.

MA1850
Mac Addict
12/96

CDW® Computer Centers, Inc. • 1020 E. Lake Cook Road • Buffalo Grove, IL 60089

YOUR #1 MACINTOSH COMMUNICATIONS RESOURCE!

CDW CIRCLE OF SERVICE®

MONITORS

NEC

M500 15" flat square w/speakers	478.81
XV15+ 15" flat square	473.13
XV17+ 17" flat square	799.84
XE21 21" flat square	1682.67
XP17 17" flat square	1048.30
XP21 21" flat square	1943.57

MAGNAVOX

CM2080 14" .29mm	249.56
CM1215 15" .28mm	341.37
CM4018 17" .28mm	599.50
20CM64 20" .31mm	835.96

SONY

15sx 15" Trinitron	395.63
15sfII 15" Trinitron	469.90
17sfII 17" Trinitron	775.83
17seII 17" Trinitron	976.41
20sfII 20" Trinitron	1635.53
Multiscan TC 20" Trinitron	3234.48

ViewSonic®

15GA 15" PerfectSound monitor	448.91
17GA 17" PerfectSound monitor	695.51
GT770 17" Graphics Series.25mm	674.31
PT770 17" Graphics Series .25mm	779.30
GT800 20" Professional Series .30mm	1309.67
PT810 21" Professional Series .30mm	1632.17

radius

PressView 17SR 17"	1986.26
PressView 21SR 21"	3179.55
PrecisionView 21 21"	2313.31

GRAPHICS/VIDEO BOARDS

ATI

Xclaim GA 2MB PCI	236.16
Xclaim GA 4MB PCI	329.64

matrox

MGA Millennium 4MB PCI graphics accelerator	379.00
MGA Millenium 8MB PCI graphics accelerator	639.00
MGA Millenium 4MB WRAM upgrade	171.11

radius

Thunder 30/1600	1037.28
Thunder 30/1152	797.18
ThunderColor 30/1600	1986.97
ThunderColor 30/1152	1584.32
ThunderPower 30/1920	1729.37

MODEMS

Global Village

PowerPort Platinum PC Card	325.29
PowerPort Platinum Pro PC Card	487.16

TELEPORT FAX/MODEMS

TelePort Platinum V.34	194.73
TelePort Platinum V.34 Internet Edition	198.17
TelePort Platinum V.34 Comm Slot Edition	198.17

Megahertz

28.8K cellular-capableCruiseCard with XJACK	231.95

MOTOROLA

Montana 28.8K cellular PC Card	228.56
Mariner 28.8K/LAN cellular PC Card	419.50
ModemSURFR	129.06
BitSURFR Pro ISDN terminal adapter	346.18

PRACTICAL PERIPHERALS

14.4 external mini-tower w/fax	79.05
28.8 V.34 external mini-tower w/fax	139.95
MacClass PCMCIA 14.4	149.69
MacClass PCMCIA 28.8	217.94

U.S. Robotics

Mac&Fax Sportster 14.4	76.61
Sportster 28.8 V.34	169.29
Sportster Voice	193.68
Courier V.Everything	276.51
Courier I-modem	479.32

STORAGE SYSTEMS

CD-ROM DRIVES

Hi-Val 4X SounTastic CD-ROM Kit	167.53
Hi-Val 8X SounTastic CD-ROM Kit	289.73
MicroNet 4X CD-ROM Kit with 5 titles	283.10
MicroNet 4X CD-ROM Kit with 10 titles	356.57
MicroNet 4X CD-ROM Kit with 12 titles	355.66
NEC MultiSpin 6XE	335.65
Panasonic 4X Portable for PowerBooks	399.00

FWB

HammerCD 2X CD-ROM recorder	595.72
HammerCD 4X CD-ROM recorder	1349.92

iomega

Zip drive 100MB SCSI external	199.95
100MB Zip disk	19.95
Jaz Drive 1GB SCSI-2 external	499.95
1GB Jaz disk	124.00

MicroNet

Advantage 1GB drive featuring "Jaz" external	527.76
Advantage 1GB "Jaz" disk	114.00

STORAGE SYSTEMS

SyQuest

EZFlyer 230MB external	291.47
EZFlyer 230MB cartridge	29.18

MEDIA

Fuji 100MB Zip Disk	19.00
Fuji 100MB Zip Disk 2 pack	34.00
Fuji 100MB Zip Disk 5 pack	79.00
3M 63 minute (550MB) CD Recordable	8.00
3M 74 minute (650MB) CD Recordable	9.13
88MB SyQuest cartridge, 5yr	45.08
200MB SyQuest cartridge, 5yr	62.93
270MB SyQuest cartridge, 5yr	51.18

Need more disk space? CDW also carries IBM, Maxtor, Micropolis and Seagate SCSI hard drives. Call for details

INPUT DEVICES

AGFA

SnapScan	367.37
Arcus II with full version Adobe Photoshop	1995.00
StudioStar w/Adobe PhotoShop LE	803.24
StudioScan IIsi	694.13

ALPS

Portable GlidePoint	39.82
Desktop GlidePoint	69.84
GlidePoint Keypad	111.83
GlidePoint Keyboard	105.88

ADESSO

PowerMouse	19.45
Soft Touch Plus extended keyboard	47.00
Tru-Form extended keyboard	77.39
Tru-Form extended keyboard w/pointer	86.81

Connectix

VideoPhone w/Quick Cam	137.04
QuickCam (grayscale) digital video camera	98.11
Color QuickCam digital video camera	222.89

EPSON

Action Scanning System II	376.41
Action Scanning System II	376.41
ES-1000C color flatbed scanner	572.37

Kodak

DC20 24-bit digital camera	299.00
DC50 24-bit digital camera w/Zoom lens	899.00

Logitech

Cordless Mouse Man	69.56
TrackMan Marble	85.23
TrackMan Live!	118.54

Microtek

ScanMaker E3	373.64
ScanMaker E6	556.25
ScanMaker E6 Pro	839.98
ScanMaker III w/trans adapter	1989.22

Nikon

Super CoolScan film scanner	1943.58
LS-20 Super CoolScan II	1165.32
AX-110 Scantouch flatbed scanner	479.79
AX-1200 Scantouch flatbed scanner	976.23

Polaroid

SprintScan 35ES film scanner	1498.00
SprintScan 35LE film scanner	781.41
SprintScan 35+ film scanner	1995.86

Relisys

Scorpio Infinity	351.54
Taurus Infinity	526.61

UMAX Computer Corporation

Vista-S6E with full PhotoShop	556.14
Vista-S12 with PhotoShop LE	679.69
Vista-S12 with full PhotoShop	759.05
PowerLook II	1877.48

VISIONEER

PaperPort VX	274.94
SCSI Adapter for PaperPort VX	62.93

PRINTERS

EPSON

Stylus Color II	279.00
Stylus Color Pro	379.00
Stylus Pro XL	1799.00

HEWLETT PACKARD

HP DeskJet 870Cse Printer	499.00
HP DeskWriter 340 Portable Inkjet Printer	293.84
HP DeskWriter 680C Printer	282.90
HP DeskWriter 1600CM Printer	1962.07
HP LaserJet 5MP Printer	953.39

Simple Technology memory upgrades

Power Mac 9500 8500 7600 7500 8MB	71.46
Power Mac 9500 8500 7600 7500 16MB	128.06
Power Mac 8100 7100 6100 8MB	71.46
Power Mac 8100 7100 6100 16MB	128.63
Power Mac 8100 7100 6100 32MB	269.68
LaserJet 4M Plus 4MB	34.31
LaserJet 4M Plus 8MB	65.74
LaserJet 4M Plus 16MB	137.78

VisionTek memory upgrades

Power Mac 8500 7500 7600 7200 256K cache	71.89
Power Mac 8500 7500 7600 7200 512K cache	109.60
PowerBook 5300 190 8MB	147.60
PowerBook 5300 190 16MB	225.31
PowerBook 5300 190 24MB	317.80
PowerBook 5300 190 32MB	429.93

If you don't see it, CALL! CDW carries memory upgrades for all your needs

Hayes ACCURA 336 V.34 for Macintosh®

The fastest low-cost Hayes modem



▼ Data: V.34 (33.6K bps) ▼ 115,200 bps throughput with data compression ▼ Fax: 14.4K bps send and receive ▼ V.42/MNP 2-4 error correction ▼ V.42bis/MNP 5 data compression ▼ Class 2 fax support ▼ Includes MacComCenter™ integrated data and fax communications software ▼ 5-year performance warranty

ACCURA 336 V.34	$149.35	CDW 74824
OPTIMA 288 V.34	$216.48*	CDW 70663

$20 rebate*

** After $20 mail-in manufacturer rebate. Offer valid through 1/31/97.*

PRACTICAL PERIPHERALS MacClass 336 V.34 MiniTower II

High-speed, high-performance communications for Macintosh®



✔ 33.6K bps data (V.34 and V.FC) ✔ 14.4K send/receive fax ✔ V.42 error control, V.42bis data compression ✔ Includes Macintosh serial cable and software ✔ Lifetime limited warranty, 7 days a week technical support

CALL!

** $20 mail-in manufacturer rebate. Offer valid through 1/31/97.*

GLOBAL VILLAGE COMMUNICATION TelePort Platinum Internet Edition



28.8K bps faxmodem

The best choice for maximum performance and Internet connectivity

▲ 28.8K bps data (V.34), the only Macintosh faxmodem with Speed Enhancers for data throughput up to 115.2K bps on standard Centris AV, Quadra, and Power Macintosh computers ▲ 14.4K bps fax send and receive ▲ Flash ROM upgradable to upcoming 33.6K bps standard ▲ Includes NETCOMplete Internet access solution from NETCOM, Netscape Navigator Web browser and e-mail software, plus award-winning GlobalFax V2.5 software ▲ 5-year warranty

Optimized for Power Macintosh · Netscape Navigator · NETCOM

$198.17 CDW 70921

TelePort Internet Edition

33.6K bps faxmodem

NEW!

▲ 33.6K bps data transfer ▲ Includes NETCOMplete Internet access and Netscape Navigator web browser and e-mail software ▲ On-screen status lets you monitor modem operations and data throughput rates conveniently, in any application ▲ Call sensing– receive fax and voice calls automatically on the same line as your answering machine ▲ Complete address book for management of phone, fax, e-mail, data and street address ▲ GlobalFax software

CALL!

COMPUTER DISCOUNT WAREHOUSE™

800-653-4239

www.cdw.com

©1996 CDW® Computer Centers, Inc. MA1850 Mac Addict 12/96

shutdown

L' Eggo My Eggo

"Instead of being a 'guardian angel whom you can trust' it (the smart fridge) could become a tyrant, withholding chocolate bars from dieters, and perhaps even deciding to go so far as deciding that humans are inefficient and thus locking its owner out of the house."
—A Sept. 1996 Reuters article describing future computers that will be able to reason, make their own decisions, and viciously keep you from your frozen Snickers bar.

In Case You Missed

"DOS Computers, manufactured by millions of companies, are by far the most popular, with about 70 million machines in use worldwide. Macintosh fans, on the other hand, may note that cockroaches are far more numerous than humans, and that numbers alone do not denote a higher life form."
—The New York Times, November 26, 1991.

104 Warning

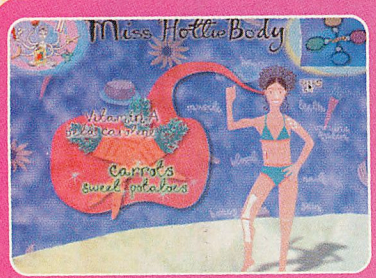
"Alien/OS contains a security vulnerability, which strangely enough can be exploited by a primitive race running Windows/95. Although Alien/OS has been extensively field tested over millions of years by EvilAliens, Inc., the bug was only recently discovered during a routine invasion of a backwater planet. EvilAliens notes that the operating system had never before been tested against a race with 'such a kick-ass president." This found while scrolling the Power Macintosh Resource Page at <http://rampages.onramp.net/~stevent/powermac.html>.

Poetic Justice

"Four out of five computers around the world have Intel chips. Now which system is the best system for these students?" —Intel spokesman Richard Draper responding to Rio Rancho, New Mexico's town officials' decision to supply the schools with Macs, even though Intel donated $30 million to build the town's only high school.

Let's Talk About Something Else

"I am a girl, I am digital and I am cool," is the message behind Let's Talk about ME!, says Laura Groppe, Girl Games president and chief executive. This girls-only CD-ROM covers girlish topics such as quizzes, cyber-pals, fashion, and horoscopes in a non-threatening diary format which "will tell you this is not your brother's software." Unless he's RuPaul.





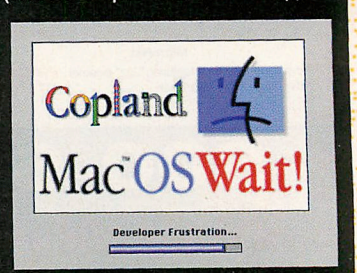
Leap of Taste

Inroads Interactive the publisher of:
- Multimedia Dogs
- Multimedia Cats
- Multimedia Exotic Pets: Horses, Birds, Aquatic & Pocket Pets
- Multimedia Bugs

recently announced its latest title for animal lovers: MULTIMEDIA GUNS: THE ENTHUSIAST'S GUIDE TO FIREARMS.

The Developers Are Getting Restless

The Mac OS Wait! logo from DWVG (The Developer Web Vote Group)

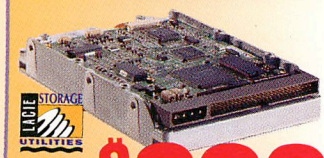


Stiff Competition

"[The EZFlyer 230MB] is the price/performance leader among removable cartridge hard drives priced under $500, and is the only removable cartridge hard drive in this category," according to a SyQuest Fact Sheet. Gee... not only is it the only one in its class, but it's also the cheapest.

A WORLD OF STORAGE SOLUTION

internal hard drives



- High-performance drive and controller technology.

$838
Internal 4.3 GB

3.5" Drives

2.1GB Quantum Fireball TM	4500 rpm 3 yr. warr.	$349
2160MB Ultrastar ES	5400 RPM 5 YR. WARR.	$379
3.2GB Quantum Fireball TM	4500 rpm 3 yr. warr.	$479
4.3GB Quantum Atlas	7200 rpm 5 yr. warr.	$838

Brackets available for $10 with internal hard drive purchase.

external hard drives



TSUNAMI

- Ready to plug and play with switchable active termination, cables, and La Cie Storage Utilities.

$449
External 2.1 GB

Tsunami External Drives

2.1GB Quantum Fireball TM	4500 rpm 3 yr. warr.	$449
2160MB Ultrastar ES	5400 rpm 5 yr. warr.	$449
3.2GB Quantum Fireball TM	4500 rpm 3 yr. warr.	$559
4.3GB Quantum Atlas	7200 rpm 5 yr. warr.	$919

cd-rom8x



- Fastest access speed available.
- Transfer rates up to 1200 kb/sec.
- Smooth audio and video playback.

$199
8X CD-Rom

Transfer Rates up to 1200kb/sec

8X CD-Rom External $199

removable



- Superior hard drive performance.
- Compact and lightweight.
- Fully compatible with SyQuest EZ-135 cartridges.

$299
SyQuest EZ-Flyer 230MB

Removable Drives

SyQuest EZFlyer 230MB Ext. $299
Includes ONE FREE cartridge! ($30 Value)

SyQuest MCD-540MB Ext. $299
Fully compatible with SyQuest 270MB cartridges.

cd-r



- Low cost media for backup.
- CD-Rs ship with Gear Multimedia software.
- Create your own CD with fast write capability.

$1099
4X CD Recorder

CD-Recorders

4X Recorder with Gear MultiMedia $1099
650 CD-R Disk 74 Minutes **10 Disk Pack** $89

jaz with 3 cartridges



- 1 GB of data on sturdy and compact 3.5-inch disks.
- Power supply included in the exclusive La Cie metal case.
- Includes 3 cartridges!

MacWeek

$599
JAZ 1GB w/3 Cartridges

3 cartridges FREE! ($288 value)

cartridges

	Qty. 1	Qty. 10
Iomega Jaz 1GB	$96 ea.	$93 ea.
Syquest 44MB	$38 ea.	$37 ea.
Syquest 88MB	$42 ea.	$41 ea.
Syquest 200MB	$62 ea.	$61 ea.
Syquest EZ135MB	$18 ea.	$17 ea.
Syquest EZFlyer 230MB	$30 ea.	$29 ea.
Syquest 270MB	$48 ea.	$47 ea.
Optical 128MB	$16 ea.	$15 ea.
Optical 230MB	$21 ea.	$20 ea.
Optical 640MB	$49 ea.	$48 ea.
Optical 1.3GB	$59 ea.	$58 ea.
Optical 2.6GB	$85 ea.	$84 ea.
CD-R 74 650MB		$8.50 ea.
DAT 90m	$8 ea.	$7.50 ea.
DAT 120m	$25 ea.	$24 ea.
DAT Cleaning Kit	$9 ea.	$8 ea.
DLT 30 30GB	$40 ea.	$39 ea.
DLT 40 40GB	$98 ea.	$97 ea.

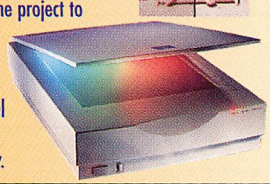
silverscanner

Compare these features:

- Color previews in seconds.
- Scans in under a minute.
- The industry's leading scanning software.

Included with all Silverscanners is **ScanPrep** which automates Photoshop's image processing tools, individually preparing each image for printing right before your eyes. Simply describe the project to ScanPrep and scan the base image. ScanPrep yields professional prepress results, quickly and easily.





Silverscanner PRO
24 bit color, 300 x 600 dpi interpolated to 1200 dpi.
- Silverscan
- ScanPrep

$499

Silverscanner PRO with Photoshop LE
24 bit color, 300 x 600 dpi interpolated up to 1200 dpi.
- Photoshop LE
- ScanPrep
- Silverscan

$599

Silverscanner DTP
30 bit color, 400 x 800 dpi interpolated to 3200 dpi.
- Silverscan
- ScanPrep

$799

Silverscanner DTP with Photoshop LE
30 bit color, 400 x 800 dpi interpolated up to 3200 dpi.
- Photoshop LE
- ScanPrep
- Silverscan

$889

Sheet Feeder Adapter (DTP and III) $499
Transparency Adapter (DTP and III) $799

LACI LIMITE

2GB
internal hard driv
Quantum Fireball
$349

- Toll Free Technical Suppo
- 30 Days Money Back Guarantee
- Ready To Plug and Play
- Award-Winning Customer Suppo

Industrial Design Excellence Award SILVER 1994

I.D. Magazine 40TH ANNUAL DESIGN REVIEW WINNER 1994

MAC HOME JOURNAL

MACUSER EDITORS' CHOICE AWARD 1995 FINALIST

MACWORLD MW EDITORS' CHOICE

Toll-free tech line:
1-800-288-9919
http://www.lacie.com/~lacie



Mon.– Fri. 5AM-7PM & Sat. 8AM-NOON PST
International 503-520-9000
Fax 503-520-9100 (24 hrs.)
http://www.lacie.com/~lacie

1-800-999-1594

AMERICAN EXPRESS DISCOVER

* La Cie Storage Utilities FREE with the purchase of a La Cie Drive. Call for details, conditions, limited money back guarantee, and free offers. Prices do not include shipping and only apply to products shipped within the continental United States. Add sales tax where applicable. Tsunami, Joule, Joule Portable, La Cie Term, Silverlining, La Cie and the La Cie logo are trademarks of La Cie, Ltd. All other trademarks are the property of their respective companies. All prices, specifications, terms, warranties, descriptions, products and services herein are subject to change without notice or without recourse. © Copyright 1996 La Cie, Ltd. All rights reserved.

UNLIKE CIGARETTE COMPANIES, We're More Than Happy To Tell You How Addictive Our Products Are.

RATHON
FINITY



ing **Marathon Infinity.**
plore the mystery of Durandal
ew levels. Fuel your Marathon
th an easy-to-use **Map Editor**
ou create an infinite number of
ved" Marathon levels.

Now you can get two new **dangerously habit-forming** games from Bungie Software, Marathon Infinity and Abuse, delivered directly to your door. **Both for just $64.99.**

TO ORDER DIRECTLY FROM BUNGIE

Visit our Website at www.bungie.com • Call us toll-free at 800-295-0060 • Fax form to 312-563-0545 • Mail form to Bungie Software, PO Box 7877, Chicago, IL 60680-7877 •

Name

Address

City, State, ZIP **Country**

Daytime Phone (important in case of mistake)

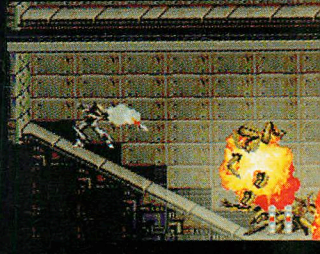
Payment Method (circle one)
Check MasterCard Visa Discover American Express

Card Number **Expiration Date**

Signature (for credit card orders)

Please add appropriate shipping: UPS $6.95, FedEx overnight $9.00. International Airmail $13.95. Illinois residents please add 8.75% sales tax. Don't worry about web orders. Our website is secure.

ABUSE
FOR MACINTOSH



Check out **ABUSE.** Created by Crack-dot-Com, ABUSE is 360° of side-scrolling action. **Napalm bombs, Lightning Prods,** and the **Death Sabre** are just a few of the toys at your disposal *in this fluid and furious game.*

Software Products Corporation. All rights reserved. Marathon and Marathon Infinity™ Bungie Software Products Corp. Abuse and Crack dot Com ©1996, Crack dot Com. Bungie is a trademark of